

JUNIOR COLLEGE JOURNAL

ANNUAL MEETING

AMERICAN ASSOCIATION OF JUNIOR COLLEGES

MARCH 25-28

BAKER HOTEL

DALLAS, TEXAS

**AMERICAN ASSOCIATION
OF JUNIOR COLLEGES**

MARCH 1953 • VOL. XXIII • No. 7

JUNIOR COLLEGE JOURNAL

OFFICIAL ORGAN OF THE AMERICAN ASSOCIATION OF JUNIOR COLLEGES



JAMES W. REYNOLDS, *Editor*

BERT KRUGER SMITH, *Associate Editor*

EDITORIAL BOARD

Representing the Six Regional Junior College Associations

THOMAS G. CARR
Bay Path Junior College
Longmeadow, Massachusetts

FRED K. ESHLEMAN
Henry Ford Community College
Dearborn, Michigan

ELLVERT H. HIMES
Dixie Junior College
St. George, Utah

KENNETH C. MacKAY
Union Junior College
Cranford, New Jersey

BONNIE E. CONE
Charlotte College
Charlotte, North Carolina

J. PAUL MOHR
Sacramento Junior College
Sacramento, California

Volume XXIII

March, 1953

Number 7

IN THIS ISSUE YOU WILL FIND *Bert Kruger Smith i*

THE AMERICAN DREAM OF A COLLEGE EDUCATION . . *Henry H. Hill 363*

ACADEMIC QUALIFICATIONS OF JUNIOR COLLEGE

FACULTIES *Harold H. Punke 366*

ENGLISH WITHOUT TEARS *Doris Hartwell Hawse 380*

ANALYSIS OF NEGRO JUNIOR COLLEGE

GROWTH *George H. Walker, Jr. 385*

OPERATING COSTS IN JUNIOR COLLEGES: 1949-50 . . *Henry G. Badger 389*

MARRIAGE EDUCATION IN THE JUNIOR COLLEGE

CURRICULUM *Henry Natunewicz 397*

MATHEMATICS FOR ONE AND TWO YEAR TERMINAL

BUSINESS PROGRAMS *W. O. Buschman 401*

SOME ASPECTS OF THE STATUS OF JUNIOR COLLEGES IN THE

UNITED STATES *404*

THE JUNIOR COLLEGE WORLD *Jesse P. Bogue 408*

FROM THE EXECUTIVE SECRETARY'S DESK *Jesse P. Bogue 413*

RECENT WRITINGS

JUDGING THE NEW BOOKS *Leon N. Henderson 418*

SELECTED REFERENCES *Maurice Litton 421*

JUNIOR COLLEGE JOURNAL is published monthly from September to May, inclusive. Subscription: \$3.50 a year, 50 cents a copy. Group subscriptions, to faculty of institutions which are members of the American Association of Junior Colleges: \$2.00 a year. Communications regarding editorial matters should be addressed to James W. Reynolds, College of Education, The University of Texas, P.O. Box 2118, Austin 12, Texas. Correspondence regarding advertisements and subscriptions should be addressed to Jesse P. Bogue, executive secretary of the American Association of Junior Colleges, 1785 Massachusetts Avenue, N.W., Washington 6, D.C. Entered as second-class matter November 22, 1938, at the Post Office at Washington, D.C., under the Act of March 3, 1879. Additional entry at Austin, Texas, August 20, 1949.

[Printed in U. S. A.]



ENGINEERING DRAWING

Thomas E. French
and
Charles J. Vierck

The Ohio State University

New Eighth Edition

In Press

Of all the books published in this field, *Engineering Drawing* has been since its publication the standard work on the subject with total sales of all editions reaching over 1,250,000 copies. This new revision is designed to maintain that position of leadership.

An entirely different arrangement and chapter order have been evolved for this edition. Material is now arranged in four basic divisions. *First*, all basic material is presented on shape description, including pictorial, perspective, intersections, and developments. *Second*, the chapters on size description are given, including the relationship between the drawing and the shop, and also the advanced material on precision and limit dimensioning. *Third*, the basic machine elements are discussed—screw threads, fasteners, keys, rivets, springs, gears and cams, etc. *Fourth*, the end point of all material included thus far is given, the chapter on working drawings, which is followed by the related specialties, architectural, structural, map and topographic drawing, etc. Almost every chapter has been revised to make the material easier to understand, easier to teach, and easier to use.

New material has been added for improvement. Every effort has been made to have the basic material as complete as possible within reasonable limits of length. Finally, many new illustrations and problems have been added for additional over-all improvement.

Send for copies on approval

McGRAW-HILL BOOK COMPANY, Inc.

330 West 42nd Street

New York 36, N. Y.

COLLEGE TYPEWRITING TECHNIQUE

by Smith and Lloyd

THE BOOK WITH COPY CONTROL

- REDUCES YOUR DROP-OUTS
- INCREASES ACHIEVEMENT
- ELIMINATES INACCURACY
- CUTS PAPER MARKING BY 90 PER CENT
- ADDS ZEST AND VARIETY
- HELPS TRANSCRIPTION
- MAKES GRADING VERY EASY

Here is the book college owners are shouting about . . . more than 200 adoptions already. It holds students. It builds high-level speed and accuracy. It makes instruction easier. It is written by famous authors and was developed in the business college classrooms! Available in both 200-lesson and 100-lesson editions.

Write your nearest Gregg office today.

GREGG PUBLISHING DIVISION

McGraw-Hill Book Company, Inc.

New York 36	330 West 42nd St.	Dallas 2	501 Elm St.
Chicago 6	111 North Canal St.	Toronto 4	253 Spadina Rd.
San Francisco 4	68 Post St.	London W.C.1	51 Russell Sq.

For Your Secretarial Program

SHORTHAND:

SHORTHAND DICTATION STUDIES By Bowman

SHORTHAND TRANSCRIPTION STUDIES By Whitmore & Wanous

TYPING:

COLLEGE TYPEWRITING By Lessenberry and Wanous

PERSONAL AND PROFESSIONAL TYPING By Wanous

PRODUCTION TYPING By Bendickson & Rickson

OFFICE PRACTICE:

EFFECTIVE SECRETARIAL PRACTICE By Beamer, Hanna, & Popham

OFFICE MANAGEMENT: PRINCIPLES AND PRACTICES By Neuner & Haynes

BUSINESS FILING (WITH PRACTICE OUTFIT) By Agnew

ACCOUNTING

SECRETARIAL ACCOUNTING By Sherwood, Boling, & Carson

SOUTH-WESTERN PUBLISHING CO.

(Specialists in Business and Economic Education)

Cincinnati 2 New Rochelle, N.Y. Chicago 5 San Francisco 3 Dallas 2

Announcing . . . one volume

An Introduction To Social Science

Book One - - - PERSONALITY

Book Two - - - WORK

Book Three - - - COMMUNITY

*Selected, written, and edited by the Social Science
Associates of the University of Minnesota*

*Arthur Naftalin
Benjamin N. Nelson
Mulford O. Sibley
Donald W. Calhoun*

with the assistance of Andreas G. Papandreou

Designed as the basic book for social science courses, AN INTRODUCTION TO SOCIAL SCIENCE is a single volume of text and readings, selected and integrated to form a coherent study of the related fields of sociology, economics, psychology, anthropology, political science and the humanities.

The three books of AN INTRODUCTION TO SOCIAL SCIENCE constitute a survey containing more than 130 readings from modern and classical sources, grouped to form an over-all pattern of study. Although present-day social scientists are the chief contributors, the editors have also drawn on the writings of poets, philosophers, jurists, novelists, and theologians in the belief that the social sciences are most fruitfully pursued when their close connection, not only with one another, but with the humanities, is recognized.

Approximately 75 per cent of the material in this volume is the selected readings. The remaining 25 per cent is the editors' introductions, headnotes preceding each reading, and bibliographical references.

1180 pages

\$6.50 list price

Write for descriptive circular

J. B. Lippincott Company

333 West Lake Street, Chicago 6, Illinois
East Washington Square, Philadelphia 5, Pennsylvania

In This Issue You Will Find----

Articles which are the statisticians' delight appear in this issue of the *Journal*. HAROLD H. PUNKE gives results of an extensive study concerning the "Academic Qualifications of Junior College Faculties," with four illustrative tables, and HENRY G. BADGER takes up a matter of interest to all junior college administrative personnel, the "Operating Costs in Junior Colleges: 1949-50."

* * *

For those with a mathematical turn of mind and an interest in the teaching of mathematics, W. O. BUSCHMAN writes about "Mathematics for One and Two Year Terminal Business Programs."

* * *

Our book review for this month was written by LEON N. HENDERSON, Pro-

fessor of Education, University of Florida at Gainesville.

* * *

Shouldn't marriage have the status of a profession? What is the junior colleges' role in helping people prepare for this important career? HENRY NATU-NEWICZ presents some of the answers in "Marriage Education in the Junior College Curriculum."

* * *

A carefully-planned analysis of Negro junior college growth is discussed in these pages by GEORGE H. WALKER, JR.

* * *

That "wistful problem child of the department, the composition course," is analyzed by DORIS HARTWELL HAWSE in her article, "English Without Tears."

* * * * *

In Future Issues You Will Find----

One teacher's prize boner and a discussion of student government are but two of the articles which will come to you in next month's *Journal*.

The May issue will be devoted entirely to reports of the annual meeting of the American Association of Junior Colleges.

BERT KRUGER SMITH

* * * * *

Calendar

Junior College State Speech Festival, Marshalltown, Iowa, March 24.

Annual Meeting, American Association

of Junior Colleges, Baker Hotel, Dallas, Texas, March 25-28.

Junior College State Music Festival, Muscatine, Iowa, March 26.

JUNIOR COLLEGE JOURNAL

Volume XXIII

March, 1953

Number 7

The American Dream of a College Education

HENRY H. HILL

This editorial by Henry H. Hill, President of George Peabody College for Teachers in Nashville, Tennessee, marks the third in a series of editorials by college presidents on the subject, "The Junior College in American Education." President Hill works actively in state and national education associations.

THE increase in the number of first-year college students for the fall of 1952 may be a very significant fact, one of far greater educational import and impact than even the educators now realize. It is reasonable to assume that most of these first-year students are eighteen years old and were born in 1934 during the decade of low birth rates. The apparent fact that 14 per cent more of the eighteen-year-olds are entering college this year than the year before is startling. There is an increase in both percentage and numbers. It is important to know why.

Undoubtedly two factors make college entrance more attractive to boys: first, entrance into college offers at least temporary certainty in the midst of the "permanent" uncertainty caused by the impact of the Korean War on the emotions of both youth and their parents; and second, the practical benefits which came to the better educated

in World War II influences younger brothers of these World War II veterans to get more education. Probably a third factor is operative. Whether we call the present prosperity pseudo or genuine, it is easier for a boy or girl to enter some kind of college in 1952 than it ever was before.

A recent issue (December 15, 1952) of *Higher Education** confirms one of my prior hypotheses about this enrollment increase. From the factors enumerated, one would assume that there would be a greater increase in men than in women. From the above publication we find that the increase of men students was greater, an actual increase of 15.5 per cent over the previous year, as compared with

*The different but not conflicting figures released in the December 20, 1952, issue of *School and Society*, prepared by President Raymond Walters of the University of Cincinnati, are restricted to 830 approved universities and four-year colleges and for this reason are not used in the above analysis.

the increase in number of women of only 11.2 per cent over the previous year. There seems no reason to doubt that both the war factor and the utility of college education for boys are influential here. It is still interesting to note, however, that the percentage of total enrollment of women in colleges has gradually risen from a post-war low of 28.9 per cent in 1948 to a post-war high of 35.5 per cent for the present academic year. The actual number of women enrolled has risen from 566,000 in 1945 to 761,000 in 1952.

America has now the almost unbelievable total of 34,693,000 persons enrolled in schools from the elementary grades through the graduate school! This highest enrollment of all time comes in the fall of 1952 when the nation has a sixty-billion-dollar war budget. It seems to demonstrate that in America we can produce "guns and butter" without the use of these 34,693,000 persons who are in school. Furthermore, there is no slump in war production at a time when 14 per cent more of the beginning college-age group are in school.

Whether this is the beginning of the much discussed biggest wave of college students in history or is caused chiefly by war and war prosperity, only the next few years will reveal. But now, or soon, there is sure to come "higher education unlimited," and this is important to those who administer the first two years of college. In these first two years, whether in junior college or

four-year college or university, are enrolled close to two-thirds of the college population. It is almost axiomatic that the increase in actual college enrollment in these early years and, more importantly, the increase of percentage of college-age youths actually enrolled in college is caused by young men and young women whose parents did not attend college.

Whether we like it or not, higher education unlimited is going to happen. It is important for us who believe that this change may be on the whole good rather than bad, to determine by study and by experiment and by trial and error how to devise a curriculum for the great average of the youth population of America. In the second place, we must realize that, unless we limit the vote—and now we are engaged in extending the vote—our voters must be educated to become literate and intelligent voters.

To teach this host of average and perhaps even somewhat below average college students may require new techniques in teaching and learning. Certainly we need to develop for this group teachers who understand that the mastery of clear and readily understood English by teacher and student may be a far more useful art than the study of the more recondite language which has been taught by great scholars to those who they hoped would be great, or at least good, scholars.

This great wave of additional

students who want to go to college is not a sudden or unexpected phenomenon. It is a part of what might be called the American dream of the past, the dream of the average father or mother, that one day his boy or girl might have a high school education—that was the dream of the 1920's, and now this same dream is translated into the hope that his boy or girl may have a college education.

From my point of view it certainly does not make sense to try to give to this average group of freshmen exactly the same curriculum taught by exactly the same methods which have been used over the years for a more highly selected group of students. In saying this, we do not deny the importance of the highly gifted or of the great middle group. Whether our intellectual objective be the Cadillac group or the Mercury group or the small-car group, the general aims and ideals and objectives are similar—but must be attained by different methodology and more understanding. It is perhaps a more

difficult task to teach the average than to teach the bright. The bright student, almost willy-nilly, will learn despite the poorest teachers. Average students and below-average students will not usually learn that way. They are more affected by experiences, by observations, by demonstrations, and by concrete evidence than they ever will be affected by abstract ideals and ideas without much demonstration.

The great American experiment of universal free education has not succeeded completely, but certainly it has not failed at the end of 100 years. Whether it is strengthened and more widely sustained by enlightened public opinion is, in large measure, dependent upon those of us who are school administrators and school teachers. The people decide about the people's schools but wisely only when they know and understand the facts and issues. We have an opportunity which is a challenge, the like of which no generation before has had. May we make the most of it.

Academic Qualifications of Junior College Faculties

HAROLD H. PUNKE

Harold H. Punke, Professor of Education at Alabama Polytechnic Institute in Auburn, Alabama, is the author of *Curiosity of Youth and the Future of Science*.

THE expansion of the junior college during the past two decades makes this institution one of considerable importance in American education. The place which it will eventually occupy between the high school and the university—its functions, potential enrollment, administrative organization, curriculum, and basis of support—will probably be a matter of development and change for several decades. One important factor in determining its future status will be the composition and training of the faculty.

This article presents the results of a study on the training of junior college faculties as indicated by the bulletins or catalogues of the institutions studied. Several of the junior colleges contacted indicated that they publish no catalogues. However, catalogues for the school year 1949-50 from 463 institutions were examined. Of this number 126 or 27.2 per cent included no information regarding the education and academic degrees of faculty members. Of the 126 schools, sixty-one were publicly controlled, whereas twenty-two and forty-three respectively were private and church controlled institu-

tions. City and district junior colleges bulked large in number of schools from which no usable data were secured.

For the other 337 junior colleges an analysis of faculty preparation was made in terms of size and type of control of the institutions, geographical regions in which they are located, degrees held by faculty members, sex of faculty members, and location of the institutions which awarded the degrees held by the faculty. Sex of faculty members was determined on the basis of names listed in the catalogue. Type of control was determined from information in the catalogue or from data in the *Education Directory for Higher Education*, 1949-50, of the United States Office of Education. Enrollment data are from "1950 Fall Enrollments in Higher Educational Institutions," 1950 Circular No. 281, United States Office of Education.

The 337 junior colleges included no publicly controlled institutions in New England, and no privately controlled institutions in the Mountain or Pacific divisions. These particular types of institutions are not numerous in the regions noted.

In evaluating junior colleges according to faculty preparation, a point scale was used which rated training as follows: below the bachelor's degree, 0; bachelor's degree but less than master's, 2; master's degree but less than doctor's, 4; and doctor's degree, 8 points. Hence if a school was rated under 1.00, over half of its faculty members had no college degree and the others held the bachelor's degree—or some equivalent combination of degree backgrounds existed. A rating of 2.00 means that the average training of the faculty was equivalent to the bachelor's degree. A rating of 3.00 means that half of the faculty had bachelor's and half master's degrees—or some equivalent combination. If the rating was 4.00, there were probably several people with doctor's degrees on the faculty and there was a high enough rating among other faculty members to prevent the high rating allowed for the doctor's degree from being lost sight of in the average.¹

Each of the 337 schools was rated according to the scale described, with one rating for the men on the staff and another for

the women. The data for the individual schools were then summarized. The results appear in Tables I and II. (See pages 368 and 369.)

Sex of faculty member in relation to training received. The totals at the bottom of the tables for the United States as a whole show that, in junior colleges of each of the three types of control noted, the men had a higher average level of training than the women. Thus the percentage of institutions in which the average training of men was rated at 3.00 or above was greater than the percentage in which women had this rating (Table II, cols. 2-11). Data at the bottom of Table I show that, for the two sexes combined, faculty members in the publicly controlled junior colleges had a higher level of training than faculty members in either of the other two types of institutions. When sex of faculty members is considered by type of school, it appears that a larger percentage of the men on the faculties of church or private schools had doctor's degrees, as shown by a rating of 4.00 or more, than was true of men in publicly controlled schools. However, the percentage of schools with a rating of from 3.00 to 3.99 for male faculty members is distinctly higher for the publicly controlled institutions than for institutions of either of the other types. This situation in regard to training of male faculty members may mean that a fairly large number of small schools in

¹Other ratings that might be helpful are: 3.74—13 per cent bachelor's and 87 per cent master's, or an equivalent combination;

3.50—25 per cent bachelor's and 75 per cent master's, or an equivalent combination;

3.26—37 per cent bachelor's and 73 per cent master's, or an equivalent combination;

2.50—75 per cent bachelor's and 25 per cent master's, or an equivalent combination.

TABLE I
EDUCATIONAL LEVEL OF FACULTIES IN JUNIOR COLLEGES (IN CODE)¹, BY TYPE OF SCHOOL CONTROL, SEX OF FACULTY MEMBER, REGION, AND SIZE OF SCHOOL (NUMBER OF SCHOOLS)

Region* and Size of School	REGION, AND SIZE OF SCHOOL (NUMBER OF STUDENTS)																							
	Publicly Controlled								Privately Controlled								Church Controlled							
	Male				Female				Male				Female				Male				Female			
\$1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
New England																								
200 or Under	—	—	—	—	—	—	—	—	1	1	1	3*	2	3	—	—	—	—	1	—	—	—	—	—
201-500	—	—	—	—	—	—	—	—	1	4	4	1	1	4	4	—	—	—	1	—	—	—	—	1
501-1,000	—	—	—	—	—	—	—	—	—	3	—	—	—	4	2	—	—	—	—	—	—	—	—	—
Over 1,000	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	2	9	6	4*	4	9	6	1	—	—	1	—	—	—	—	1
Middle Atlantic																								
200 or Under	—	—	—	1	—	1	—	—	—	1	3	2	—	4	3	—	—	—	1	—	—	—	1	—
201-500	—	2	—	—	—	1	1	—	—	—	3	—	—	1	2	—	1†	—	—	1*	—	—	1	—
501-1,000	1	1	—	1	—	1	2	—	—	—	1	1	—	—	1	1*	—	—	2	—	—	1	1	—
Over 1,000	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	1	3	1	2	—	3	3	1	—	1	7	3	—	5	6	1*	1†	—	4	1*	—	3	2	—
East North Central																								
200 or Under	—	—	—	1	—	—	—	1	—	1	—	—	—	1	—	—	—	—	4	1	—	—	1	1
201-500	—	—	4	5	—	1	7	1	—	—	2	1*	—	1	2	—	—	—	2	—	—	—	1	1
501-1,000	—	—	1	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Over 1,000	—	—	2	1	—	—	2	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—
Total	—	—	7	7	—	1	9	4	—	1	2	1*	—	2	2	—	—	1	7	1	—	1	3	2
West North Central																								
200 or Under	—	5	17	1	—	9	13	1	—	2	—	1	—	1	2	—	—	6	3	2*	1	5	4	1
201-500	1	1	12	—	—	3	10	1	—	—	—	—	—	—	—	—	—	3	4	—	—	7	—	
501-1,000	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Over 1,000	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Total	1	7	29	2	—	13	23	3	—	2	—	1	—	1	2	—	—	6	7	7*	1	5	12	1
South Atlantic																								
200 or Under	—	—	—	1	—	—	—	—	—	5	1	2	1	5	3	—	2	5	9	4*	—	17	4	—
201-500	1	2	5	1	—	4	3	2	—	2	—	—	—	3	—	—	1†	2	5	5	—	7	5	—
501-1,000	—	—	1	—	—	—	—	1	—	—	1	—	—	—	—	—	1	—	1	—	—	—	—	—
Over 1,000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	1	2	6	2	—	4	3	3	—	5	4	2	1	8	3	1	3†	7	16	9*	—	25	9	1
East South Central																								
200 or Under	—	2	—	—	—	2	—	—	—	2	1	1	—	2	1	—	1	2	4	4†	—	7	3	—
201-500	—	4	5	1	—	4	6	—	—	1	—	—	—	—	1	—	1	3	7	2*	1	8	3	1*
501-1,000	—	—	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Over 1,000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	6	6	1	—	7	6	—	—	3	1	1	—	2	2	—	2	5	11	6†	1	13	6	1*
West South Central																								
200 or Under	1	3	2	2	—	3	3	2	—	—	1	—	—	—	1	—	—	3	1	—	1	2	1	—
201-500	1	4	6	2*	—	5	7	1	—	—	—	—	—	—	—	—	—	3	3	2	—	2	2	—
501-1,000	—	2	7	—	—	9	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	1	—	—
Over 1,000	1	2	1	1	—	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	3	11	16	5*	—	8	24	3	—	1	—	—	—	—	—	—	—	4	4	3	1	5	4	—
Mountain																								
200 or Under	—	2	1	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
201-500	—	3	1	1	—	4	—	1*	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—
501-1,000	1	1	2	—	—	3	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Over 1,000	—	1	1	1	—	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	1	7	5	2	—	11	2	2*	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Pacific																								
200 or Under	—	1	2	—	—	2	—	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
201-500	—	2	6	—	—	4	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
501-1,000	—	2	7	—	—	4	4	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Over 1,000	—	1	8	5	—	1	10	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	6	23	5	—	9	20	5	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
United States																								
200 or Under	1	13	22	6	—	18	19	5	1	12	7	9	3	16	10	1	3	16	22	11	2	32	14	2
201-500	3	18	39	10	—	26	38	6	1	5	11	2	1	9	9	—	3	5	23	14	1	18	21	2
501-1,000	2	7	19	1	—	10	16	3	—	3	2	1	1	2	1	2	—	1	4	2	—	3	4	—
Over 1,000	1	4	13	9	—	2	17	7	—	1	1	—	—	—	2	—	—	1	3	—	—	1	—	—
Total—Number	7	42	93	26	—	56	90	21	2	21	21	12	5	27	22	3	6	23	52	27	3	54	39	5
Percent	4.2	25.0	55.3	15.5	0.0	33.5	53.9	12.6	3.6	37.5	37.5	21.4	8.7	47.4	38.6	5.3	5.6	21.3	48.1	25.0	3.0	53.4	38.6	5.0

¹The following scale is used in the evaluation: Less than a bachelor's degree—0; bachelor's degree—2; master's degree—4; doctor's degree—8.

*Regions are: New England—Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island
Middle Atlantic—New York, New Jersey, Pennsylvania
East North Central—Ohio, Indiana, Illinois, Michigan, Wisconsin
West North Central—Iowa, Missouri, Minnesota, North Dakota, South Dakota, Nebraska, Kansas
South Atlantic—Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida
East South Central—Kentucky, Tennessee, Alabama, Mississippi
West South Central—Arkansas, Louisiana, Oklahoma, Texas
Mountain—Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada
Pacific—Washington, Oregon, California

†Includes one school with higher average

‡Includes one school with lower average

§Includes two schools with higher average

§The numbers in this line are code numbers: 1 means from 1.00 to 1.99; 2 means from 2.00 to 2.99, etc.

TABLE II
EDUCATIONAL PREPARATION OF FACULTY IN JUNIOR COLLEGES (IN CODE)¹, BY SEX OF FACULTY MEMBERS, REGION
AND SIZE OF SCHOOL (PERCENTAGE DISTRIBUTIONS)

Region ² and Size of School	Male					Female					Total				
	Number of Schools	Percentage Distribution				Number of Schools	Percentage Distribution				Number of Schools	Percentage Distribution			
		1	2	3	4		1	2	3	4		1	2	3	4
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
New England															
200 or Under	6*	16.7	16.7	16.7	50.0	6	33.3	50.0	—	16.7	6	—	66.7	16.7	16.7
201-500	11	9.1	36.4	45.5	9.1	10	10.0	40.0	50.0	—	11	9.1	36.4	54.6	—
501-1,000	3	—	100.0	—	—	3	33.3	66.7	—	—	3	—	100.0	—	—
Over 1,000	2	—	50.0	50.0	—	2	—	—	100.0	—	2	—	50.0	50.0	—
Total	22*	9.1	40.9	31.8	18.2	21	19.0	42.9	33.3	4.8	22	4.5	54.6	36.4	4.5
Middle Atlantic															
200 or Under	8	—	12.5	50.0	37.5	9	—	66.7	33.3	—	9	—	33.3	66.7	—
201-500	7*†	14.3	28.6	42.9	14.3	7	—	42.9	57.1	—	7	—	42.9	57.1	—
501-1,000	7	14.3	14.3	42.9	28.6	7	—	28.6	57.1	14.3	7	14.3	28.6	28.6	28.6
Over 1,000	2	—	—	100.0	—	1	—	—	—	100.0	2	—	—	50.0	50.0
Total	24*†	8.3	16.7	50.0	25.0	24	—	45.8	45.8	8.3	25	4.0	32.0	52.0	12.0
East North Central															
200 or Under	7	—	14.3	57.1	28.6	4	—	25.0	25.0	50.0	7	—	14.3	57.1	28.6
201-500	14	—	—	57.1	42.9	14	—	14.3	71.4	14.3	14	—	—	92.8	7.1
501-1,000	2	—	—	100.0	—	2	—	—	50.0	50.0	2	—	—	100.0	—
Over 1,000	4	—	25.0	50.0	25.0	4	—	25.0	50.0	25.0	4	—	25.0	50.0	25.0
Total	27	—	7.4	59.3	33.3	24	—	16.7	58.3	25.0	27	—	7.4	77.8	14.8
West North Central															
200 or Under	37*	—	35.1	54.1	10.8	37	2.7	40.5	51.4	5.4	37	—	37.8	59.5	2.7
201-500	21	4.8	4.8	71.4	19.0	21	—	14.3	80.9	4.8	21	—	9.5	85.7	4.8
501-1,000	2	—	50.0	—	50.0	2	—	50.0	50.0	—	2	—	50.0	—	50.0
Over 1,000	2	—	—	50.0	50.0	1	—	—	—	100.0	2	—	—	50.0	50.0
Total	62*	1.6	24.2	58.1	16.1	61	1.6	31.1	60.7	6.6	62	—	27.4	66.1	6.5
South Atlantic															
200 or Under	29	6.9	34.5	34.5	24.0	30	3.3	73.3	23.3	—	32	9.4	46.9	40.6	2.9
201-500	24	8.3	16.7	50.0	25.0	24	—	58.3	33.3	8.3	25	4.0	44.0	48.0	4.0
501-1,000	3	—	—	100.0	—	3	—	33.3	—	66.7	3	—	—	100.0	—
Over 1,000	1	—	—	100.0	—	1	—	—	—	100.0	1	—	—	100.0	—
Total	57	7.0	24.6	45.6	22.8	58	1.5	63.8	26.2	8.6	61	6.6	42.6	47.5	3.3
East South Central															
200 or Under	17	5.8	35.3	29.5	29.5	15	—	73.3	26.7	—	17	11.8	52.9	29.4	5.9
201-500	24	4.2	33.3	50.0	12.5	24	4.2	50.0	41.7	4.2	24	—	37.5	62.5	—
501-1,000	1	—	—	100.0	—	1	—	100.0	—	—	1	—	100.0	—	—
Over 1,000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	42	4.9	33.3	42.9	19.0	40	2.5	60.0	35.0	2.5	42	4.9	45.2	47.6	2.5
West South Central															
200 or Under	13	7.7	46.2	30.7	15.4	13	7.7	38.4	38.4	15.4	13	7.7	46.2	38.4	7.7
201-500	18	5.6	22.2	50.0	22.2	17	—	41.2	52.9	5.9	18	—	16.7	72.2	11.1
501-1,000	11	—	27.3	63.6	9.1	11	—	9.1	91.9	—	11	—	18.2	81.8	—
Over 1,000	5	20.0	40.0	20.0	20.0	5	—	—	100.0	—	5	—	20.0	80.0	—
Total	47	6.4	31.9	44.6	17.0	46	2.2	28.3	63.0	6.5	47	2.1	25.5	66.0	6.4
Mountain															
200 or Under	3	—	66.7	33.3	—	3	—	—	100.0	—	3	—	66.7	33.3	—
201-500	6	—	50.0	33.3	16.7	6	—	66.7	16.7	16.7	6	—	50.0	33.3	16.7
501-1,000	4	25.0	25.0	50.0	—	4	—	75.0	25.0	—	4	25.0	25.0	50.0	—
Over 1,000	3	—	33.3	33.3	33.3	3	—	33.3	33.3	33.3	3	—	33.3	33.3	33.3
Total	16	6.3	43.8	37.5	12.5	16	—	68.8	18.8	12.5	16	6.3	43.8	37.5	12.5
Pacific															
200 or Under	4	—	25.0	75.0	—	4	—	—	75.0	25.0	4	—	25.0	75.0	—
201-500	8	—	25.0	75.0	—	8	—	50.0	50.0	—	8	—	25.0	75.0	—
501-1,000	9	—	22.2	77.8	—	9	—	44.4	44.4	11.1	9	—	33.3	66.7	—
Over 1,000	14	—	7.2	57.1	35.7	14	—	7.2	71.4	21.4	14	—	7.2	64.3	28.6
Total	35	—	17.1	68.6	14.3	35	—	25.7	60.0	14.3	35	—	20.0	68.6	11.4
United States															
200 or Under	124	4.0	33.1	41.9	21.0	121	4.1	54.6	34.7	6.6	128	4.7	42.9	46.9	5.5
201-500	133	5.3	21.1	54.1	19.5	131	1.5	40.5	51.9	6.1	134	1.5	27.6	66.4	4.5
501-1,000	42	4.8	26.2	59.2	9.5	42	2.4	35.7	50.0	11.9	42	4.8	31.0	57.1	7.1
Over 1,000	33	3.0	18.2	51.5	27.3	31	—	9.7	64.5	25.8	33	—	15.1	60.6	24.3
Total—Number	332	15	86	166	65	325	8	137	151	29	337	10	110	193	24
Percent	100.0	4.5	25.9	50.0	19.6	100.0	2.5	42.1	46.5	8.9	100.0	3.0	32.6	57.3	7.1

¹For explanation of footnotes see Table I.

the private and church categories had few men on their teaching faculties—other than perhaps the head of the school and a few department heads. The training of women faculty members in private and church schools was distinctly inferior to that of women in the publicly controlled institutions—as shown by the data.

Geographical region and faculty preparation.—When comparisons are made among the different geographical divisions, for schools of all types and all sizes and for faculty members of both sexes, a slightly higher percentage of the schools in the South Atlantic and Mountain divisions had faculties with training which averaged below the bachelor's degree than was true of the schools in other divisions (Table II, col. 13). When the faculty as a whole is considered, both sexes, the tables show no junior college in the East North Central, West North Central, or Pacific divisions with a faculty whose training averaged less than the bachelor's degree. However, in the West North Central Division the faculty men of one school had an average training below this level, and in another school the faculty women had an average below the level indicated.

The data show that the junior colleges in the East North Central Division had a higher average level of training among their faculty members than the schools of any other division. Thus a larger per cent of the faculties in this division

had preparation equal to or above the master's degree (code 4.00-4.99) than was true of faculties elsewhere (14.8 per cent, see Table II, col. 16). The next closest ranking division was the Mountain Division with 12.5 per cent, and the lowest was the East South Central Division with 2.4 per cent. Moreover, a larger percentage of the faculties of the East North Central Division had training rated on the code as from 3.00 to 3.99 (77.8 per cent, see col. 15) than was true of any other division. The Pacific Division ranked second in this comparison with a corresponding percentage of 68.6 per cent. On the other hand, the East North Central Division had the smallest percentage of institutions of any division with faculties rated in the category 2.00-2.99 (7.4 per cent, see col. 14). The division ranking next in smallness of number of faculties with this low level of preparation was the Pacific Division, with 20.0 per cent of its junior colleges having faculties of the level noted. By contrast, the faculties of more than half of the New England schools reporting (54.6 per cent) fell in this category. All but one of the New England schools reporting were private schools.

Size of junior college and preparation of faculty.—When consideration is given to faculty training in relation to size of junior college, the only regions for which Table II shows an institution with more than 500 students in which the average training of the faculty,

both sexes, was less than the bachelor's degree were the Middle Atlantic and Mountain divisions. For three divisions the tables report no junior college of any size in which the average training of faculty members was less than the bachelor's degree: East North Central, West North Central, and Pacific. On the other hand, the South Atlantic Division reported more institutions with faculties having this low level of training than were reported by any other division.

Calculations from Table II, col. 12, show that 75 or 22 per cent of the 337 schools enrolled more than 500 students each, and that thirty-two or roughly 9 per cent enrolled more than 1,000 students each. A casual examination of the data which deal with individual regions (Table II, cols. 12-16) does not indicate that the faculties of junior colleges with enrollments of more than 500 students are consistently superior to the faculties of smaller schools. However, in the Pacific Division, which includes fourteen of the thirty-three institutions enrolling over 1,000 students each, the training of faculty members in institutions of this size was on the whole definitely superior to that of faculties in smaller schools. The data for the United States as a whole, at the bottom of the tables, reflect the importance of the Pacific Division in regard to the rating of faculties in all schools of over 1,000 students each.

Analysis of qualifications of mas-

ter's-degree teachers.—Because of the place of the master's degree in the qualification of junior college faculties as indicated by the foregoing analysis, and because of recent increases in number of high schools which include a substantial percentage of master's degree members on their faculties, a study was made concerning the location of the institutions from which the master's degree teachers received their bachelor's and their master's degrees. Usable data on this point were available for 5,801 master's degree faculty members. The data appear in Table III. (*See Page 372.*)

Calculations from the totals line at the bottom of the table show that of the 5,801 faculty members reported, 3,535 were men and 2,266 were women. A comparison between columns 8 and 9, and between columns 14 and 15, shows that in the private and church schools there was no great difference between the sexes with respect to representation on the faculties. However, the faculties of publicly controlled schools included nearly twice as many men as women. Hence from the standpoint of sex of faculty members, the private and church institutions more nearly resembled the high school—with the preponderance of women which the latter has on its staff, whereas the publicly controlled institutions more closely resembled the university—with a preponderance of men on the staff. It might be noted in passing that Missouri is the only state in which more women than

TABLE III
LOCATION OF INSTITUTIONS AT WHICH MASTER'S DEGREE FACULTY MEMBERS IN JUNIOR COLLEGES RECEIVED THEIR BACHELOR'S
AND THEIR MASTER'S DEGREES, BY REGION, TYPE OF SCHOOL, AND SEX OF FACULTY MEMBERS

Geog. Div.	Public										Private										Church																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
	No. of Faculty Members from within the State					No. with both Bachelor's & Master's from within the State					No. of Faculty Members Reported					No. with Master's from within the State					No. of Faculty Members Reported					No. with Master's from within the State					No. with both Bachelor's & Master's from within the State																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
	M	W	3	4	5	M	W	6	7	8	M	W	9	10	11	M	W	12	13	14	M	W	15	16	17	18	19	M	W	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															

†Percent for the sex group and type of school that received within the state the amount of education indicated. Thus in publicly controlled junior colleges 46.8 per cent of the 2,500 male faculty members shown received their master's degrees from within the state whereas 40.2 per cent received both the bachelor's and master's degrees from within the state in which they were teaching.

men were reported on the faculties of publicly controlled junior colleges.

For the country as a whole a larger per cent of the faculties of state controlled junior colleges received their degrees within the state in which they were teaching than was true of the faculties in private and church schools. One factor of explanation in this connection probably is that a few geographically large states accounted for a large proportion of the faculty members in the publicly controlled schools reported. This was especially true of California in the Pacific Division, of Texas in the West South Central Division, of Kansas in the West North Central Division. In these states the publicly controlled senior colleges and universities are as strong as if not stronger than the private or church schools, and constitute some of the best institutions at which members of the junior-college faculties might earn degrees. No comparable group of states accounts for a similar proportion of the faculties of the private and church schools reported. Another factor of explanation probably is the fact that publicly controlled junior colleges are frequently adjuncts to public secondary schools—with the same or somewhat different school-district boundaries. In such cases the same philosophy regarding the type and place of teacher education may govern both the high school and the junior college—with the idea more clearly

emphasized than elsewhere that the junior college is a part of secondary education. In addition, the heads of church schools frequently try to secure at least a part of the faculties of their institutions from four-year colleges or universities controlled by the denomination to which the junior college belongs. In many instances such faculty members must therefore come from outside the state in which the junior college is located. To some extent privately controlled junior colleges, because of the "liberal arts tradition" or for other reasons, may follow a faculty-employment pattern similar to that noted regarding church schools. Table III shows no great difference between the private and the church schools in per cent of faculty members trained outside the state in which they were teaching.

Calculations from the table show that for the nation as a whole roughly from three-fifths to four-fifths of the faculty members, in any sex or school-type category, who received the master's degree from an institution within the state in which they were teaching also received the bachelor's degree from an institution within that state. Thus 46.8 per cent or 1,170 of the 2,500 men with master's degrees who were teaching in publicly controlled junior colleges received their master's degrees from institutions within the states in which they were teaching, while the 1,005 men or 40.2 per cent of the 2,500 who also received their

TABLE IV

PERCENTAGE DISTRIBUTION, BY REGION AND SEX, OF MASTER'S DEGREE FACULTY MEMBERS IN PUBLICLY CONTROLLED JUNIOR COLLEGES WHO RECEIVED THEIR DEGREES WITHIN THE STATE IN WHICH THEY WERE TEACHING

<i>Geographical Division</i>	<i>No. of Faculty Members Reported</i>		<i>Pct. with Master's from Within the State</i>		<i>Pct. With Both Bachelor's and Master's from Within the State</i>	
	<i>M</i>	<i>W</i>	<i>M</i>	<i>W</i>	<i>M</i>	<i>W</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
N. Eng.	—	—	—	—	—	—
M. Atl.	105	21	32.4	28.6	32.4	23.8
E. No. Cent.	289	176	58.5	61.4	33.6	34.1
W. No. Cent.	331	240	47.7	37.5	39.6	28.8
So. Atl.	110	66	26.4	15.2	21.9	10.0
E. So. Cent.	115	65	23.5	4.6	16.6	4.6
W. So. Cent.	398	239	65.8	55.6	61.6	49.4
Mountain	205	77	23.9	37.7	18.0	29.9
Pacific	947	390	46.6	50.8	43.9	50.0
No.	2500	1274	1170	577	1005	480
U. S.						
Pct.	100.0	100.0	46.8†	45.3†	40.2†	37.7†

†Same as in Table III.

bachelor's degrees from within the state constitute 85.9 per cent or slightly more than four-fifths of the 1,170 men noted.

For private and church schools, the proportion of faculty members who received both the bachelor's and master's degrees from an institution within the state in which they were teaching was approximately half as large as for the publicly controlled institutions. In addition, the master's-degree teachers in private and church schools who did receive the master's from

within the state, did not receive the bachelor's from within the same state to quite as great an extent as did the master's-degree teachers in publicly controlled junior colleges. Geographical size of state and strength of institutions within different states, mentioned earlier, seem pertinent here.

Master's-degree teachers in publicly controlled junior colleges.—Roughly two-thirds (65.1 per cent) of the master's-degree teachers in the various junior colleges reported were in publicly controlled institu-

tions. Because of the prominence of publicly controlled institutions thus shown, the percentages of the master's-degree teachers who had received their degrees from within the states in which they were teaching were calculated on a regional basis. The data appear in Table IV. See page 374.

The eight geographical divisions for which data appear fall into two groups—concerning percentages of master's-degree teachers in publicly controlled schools who received their degrees from within the states in which they were teaching. In the East North Central, West North Central, West South Central, and Pacific divisions a substantially higher percentage were from within the state than in the other four divisions. In the three of the first group of divisions which lie west of the Mississippi River, the average state is of considerable size—and the geographical distance to schools outside the state may be important. Moreover, in several of the states, in all four divisions of the first group, state universities and state agricultural and mechanical colleges are among the most outstanding institutions of the region in which to secure advanced training. This point received passing comment earlier. The probable importance of both distance to get outside the state and strength of public or private institutions within the state is apparent if one notes that about 62 per cent of the faculty members reported from the

West North Central Division represent junior colleges in Kansas, Iowa, and Minnesota; about 85 per cent of the members from the West South Central Division represent institutions in Texas and Oklahoma; a slightly larger per cent of those from the Pacific Division represent California junior colleges; and practically all of those from the East North Central Division are from Michigan and Illinois.

Perhaps a note should be added concerning sex of faculty members in relation to percentage receiving preparation at institutions within the state in which they were teaching. For five of the eight geographical divisions and for each of the two degree designations of Table IV, a larger percentage of the men than of the women received their general and professional training within the state. Two of the other three divisions, the East North Central and Pacific divisions, were shown in the analysis of Tables I and II to stand highest among divisions regarding level of faculty training for all types of junior colleges combined. The relative status in Tables I and II of the third of the three divisions, the Mountain Division, is less clear cut.

Insofar as having received one's preparation from institutions within the state in which one teaches reflects faculty inbreeding, master's-degree men who were on the faculties of junior colleges in most sections of the country reflected more inbreeding than master's-

degree women. This may mean that family responsibilities of men on such faculties did not permit them to get far from home to secure graduate training. Possibly several of these men were former high school teachers who were able to extend their training, beyond high school requirements, largely by attending evening or week-end classes on a commuting basis. Of course, some of the men, or women, on the staff of a junior college may also teach in high school. However, the economic factor suggested would seem to have less effect on the location at which preparation for junior college teaching is received by women than by men. The Pacific and East North Central divisions, in which a larger percentage of women than of men received their degrees from within the state where they were teaching, are both areas in which each state that is represented in this study by many faculty members has several good institutions for graduate study within the state. Available data, however, do not justify pushing the foregoing analysis too far.

Conclusions.—Perhaps a few concluding observations are in order:

(1) In the rapid growth of junior colleges during the past decade or so, the preparation of faculties seems to have received less attention than some other aspects of junior college development. It seems reasonable to suppose that the level of faculty training will rise in the future, although several factors will probably affect the rate

of extent of such rise. Among these factors are the following:

a. The extent to which junior colleges are administratively connected with senior high schools and have their programs integrated with the high school programs will probably affect the future development of the junior college. Where there is a close integration of administration and curriculum, the idea may easily become accepted that teachers in the junior college section of the institution should have about the same level of training as teachers in the senior high school section. In any case, however, with the increasing proportion of high school teachers who hold master's degrees, one should expect increasing pressure for junior college teachers to have at least an equal level of preparation.

b. The extent to which the expanding junior college acts as a terminal institution may affect the emphasis placed on the academic degrees held by its faculty members. For students who enter into non-technical or semi-technical employment upon completion of a junior college course, or who become housewives, matters of personal and vocational adjustment may deserve more attention than a high level of academic attainment. Academic achievement probably deserves more attention on the part of the students who plan to pass from junior colleges into senior colleges and universities. The relative importance of these two functions for a particular junior college is

likely to be reflected in the kind and amount of faculty preparation that is emphasized.

c. In more than one way, tradition may affect the rate and direction of improvement in preparation of junior college faculties. The content of training set up for the doctor's degree will affect its value for instructional work in the junior college. Perhaps the teaching emphasis of the Doctor of Education in contrast with the research emphasis of the Doctor of Philosophy may make the former somewhat more useful for members of a junior college staff. However, with the higher level of faculty preparation and the need for research concerning various aspects of an expanding school system, the educational profession should not overlook the contributions which members of the teaching staff can make toward solving educational problems. Giving a degree one name instead of another is not likely to improve the profession. The important thing is the kind of problems that are attacked, in teaching situations or elsewhere, and the use made of the findings. If it is realized that practically any kind of problem can be attacked under either degree title, then the difference between the two labels will disappear—where any difference now exists. The situation here is similar to that of the gradual disappearance of the difference between the normal school and the arts college.

A second factor of tradition re-

lates to possible recognition of some intermediate point in advanced professional preparation between the master's and doctor's degrees. In America the doctor's degree has seldom been considered preparation for teaching in high school, although it is coming to be regarded as a usual part of the qualifications for teaching in senior colleges and universities. If the junior college becomes a broadly accepted segment of the American educational ladder, intermediate between high school and university, further development of the junior college may be accompanied by a clearer professional recognition of some intermediate level of training for its faculty. A master's degree based on two years' work beyond the bachelor's degree, which some institutions now offer in Education and which is fairly common in some other professional fields, may be suggestive regarding the junior college situation.

d. Many American educators will probably maintain that the amount of the nation's energy and resources devoted to war and related activities during the next two decades will greatly affect the amount that remains for education or other "peacetime" developments. This view may have seemed more realistic a decade ago than it does now. One thing that educators at mid-century need to understand is that a broad background of general and technical education is a major national resource and an important wartime need. Since the

American people as a whole have a right to expect educators more than other vocational groups to understand the function and possibilities of education in the social structure, it becomes a responsibility of educators to point out and demonstrate the essential character of education in any adequate program for developing national strength and security. Hence educators should not retreat and assume that schools and educational programs during an international emergency should be haphazardly supported out of what is left over *after* "emergency" needs are met. If the nation understands that education ranks high *among* emergency needs, the development of junior colleges during the next two decades will be quite different from what it will be if education at this level is considered a "non-essential."

(2) An early reference in this article noted that slightly over a quarter of the junior college catalogues examined included no information on the training or professional background of faculty members. In this respect these particular institutions resemble high schools more than senior colleges. If a junior college is a local district or community institution on about the same basis as a public high school—as a preliminary statement in the article indicated was the case with respect to several publicly controlled institutions—or if the junior college is organizationally integrated with the high school, there may appear to be no more

need for a school bulletin or catalogue to carry information concerning the professional qualifications of teachers in the junior college than of teachers in the high school. One response on this point is that present or potential students and patrons at either level should be interested in the quality of the faculty concerned and should have access to information regarding that quality. Certainly students who contemplate attending a school at some distance from home, or persons who attempt to counsel or advise students about attending such a school, could hardly offer intelligent advice without information on the professional background of a school's faculty. Perhaps such advisers and their clients will find it desirable, early in their deliberations, to eliminate schools on which such information is not readily accessible.

(3) In the analysis of Tables I and II reference was made to several junior colleges with faculties having an average training of less than the bachelor's degree—code 1.00-1.99. One evil of weak educational institutions, at all levels, is that students and their parents are led to think that a respectable quality of education is available, and they do not find out that such is not the case until the student enters a vocation or enters some other educational institution in which he must compete with people who have better training than he has. An educational repair job at a later date for poorly trained youth may

be expensive in money and time, and is likely to be accompanied by embitterment. For the foregoing and other reasons, attention should be given to the qualification of junior college faculties—at a time when the junior college is rapidly expanding.

(4) With the teacher shortages that currently exist in some geographical and subject-matter areas, particularly subject areas which involve the type of training that is in demand in industrial expansion and governmental activity, and with the small current enrollment in collegiate institutions and departments which prepare teachers, the use of summer schools and the development of in-service training programs may constitute the most promising avenues for up-grading junior college faculties. Such factors as salary and tenure of course influence teacher incentive for improvement. The same may be true of school policy regarding general sex ratio among faculty members, or regarding men's fields and women's fields so far as teaching activities and guidance functions are concerned. Sometimes sex and dependency status is related to a stability of faculty. If high school or college teaching should be considered "essential employment," under a broadened perspective concerning the international emergency, the sex ratio among high school or junior college teachers during the next decade might be quite different from what it would other-

wise be. The interest of teachers in up-grading might likewise be affected.

(5) The article gives considerable attention to the location of institutions at which members of junior college faculties received their bachelor's and master's degrees, with comment on the percentage of faculty members who received their degrees from institutions within the state in which they were teaching. Faculty inbreeding or provincialism can obviously be a limiting factor in the quality of education which junior colleges make available to their students. If a large proportion of the faculty of a junior college have received their general and professional education from institutions within the same state as that in which the junior college is located, there may be such inbreeding or provincialism. In most instances, however, it is better to have a master's degree, or a bachelor's degree, from an institution within the state than not to have the degree. Moreover, in several states there are institutions within the state which are better qualified to give graduate degrees than most institutions outside the state. It should be recognized that there are various forms of inbreeding among educational institutions and various factors which influence the extent of the inbreeding. For any detailed consideration of this point a more comprehensive study is needed than that here reported.

English Without Tears

DORIS HARTWELL HAWSE

Doris Hartwell Hawse, who teaches English and Science at Anderson College in Anderson, S.C., has published articles in the *Journal* and in the *Journal of Higher Education*. For twelve years a teacher of English, biology and chemistry, she also writes occasional newspaper features and is a member of the Author's Club, honorary writing society at the University of Maryland.

AT THE outset let me remark that "English" is here used in its strict denotation of English as a language, or in other words in terms of that wistful problem child of the department, the composition course. Let the lucky or the underprivileged (according to the point of view) who do not teach it therefore turn the page.

After plowing slowly and steadily through five or six handbooks or composition texts for different levels of freshmen with exactly the sensation of one who walks in heavy sand, I decided to try the functional method of teaching grammar, *i.e.*, of determining student needs and the resulting class-work by student errors. I do not offer this system as original, nor am I irrevocably convinced of its merits; I describe my efforts as a kind of experiment, as only a possible answer to the eternal problem of teaching those people who cannot use their mother tongue correctly.

What are the reasons for using a functional method? First, it is in line with the current tendency towards the functional, the practical, indeed the vocational; much as I deplore our national indifference to culture for culture's sake,

I feel that such a mechanical subject as grammar benefits by emphasis on the useful. If the main purpose of our first-year course is to learn *how*, then the most effective way to achieve it is by *doing* in everyday situations, and it is certainly hard to imagine situations for the use of our more esoteric grammatical theory. The functional method works on the student's own weaknesses and introduces business letters, reports, term papers (which double as articles), and even short book or movie reviews, all forms usable elsewhere.

Since respected Webster's permits us to use "can" and "may" interchangeably; since the use of the comma and the capital is changing in the direction of extinction, even among our less radical writers, we can only conclude that some of our formal grammar is dying out of use. So we are back where we started: why study what one will not use even as mental decoration? Browning's grammarian is the only person on record who loved grammar for its own sake.

Another reason for the abbreviated practical grammar is found in the time element. To teachers

of English I need not mention the overcrowded state of the composition course; besides the correct use of the language, its objectives also include the teaching of reading by one means or another. With less time spent on theory, more periods can be allotted to reading, with consequent broadening of the rather limited freshman horizon.

Not as whimsical as it sounds is the student's dislike of grammar as a cogent reason for limiting it as far as possible without damaging the basic requirements for better writing and speaking. Students are still young enough to be intensely practical, like children. "What good is it?" they often ask disconcertingly. Much of their distaste for English, oftenest seen in the male contingent, stems from its apparent uselessness. One may well ask how parsing sentences will help meet the exigencies of life! Just plain boredom is also involved, as the dreary procession of colorless rules marches slowly by. The faster movement of the functional course, its reiterated practical aims, the emphasis on the student's own needs, may well help, incidentally, to remove some of the opprobrium attached to "English."

So much for the background which stimulated this attempt to work out a fresh approach. The method itself depends chiefly, as has been indicated, on constant use of the language, by weekly classroom themes and by short speeches. The latter are difficult to schedule in a large class, and the carryover

into home or business life is inadequate, one fears, but the writing is both easy to get in and more lasting in its impression, either because of the motor association or because of the greater care expended on it. When I suggest a weekly theme, I do not have in mind the complete annihilation of already overworked teachers: I find that a half-page or a one-paragraph composition provides just as revealing a cross-section of student shortcomings as a long one, and it seems to cure the common ailment of having nothing to say. A few students have to be compressed rather unwillingly into this "narrow room," but with the result of increased concentration of thought and style. Such short pieces can be quickly graded for an average section of twenty-five, the commonest errors noted down, the individual mistakes marked on each paper. At the next meeting the faults selected as typical enough and frequent enough are discussed in class.

My treatment has been to state the rule as simply as I can, to discuss the situation, with examples, and then to ask that rule and illustration be written in a special section of the notebook. Later I re-emphasize these errors in other meetings by brief exercises or even by tests. I question the value of the test unless it consists of a paragraph containing the mistakes as they might appear on a theme or in a letter; a theoretical test does not duplicate real conditions of use. Frequently I ask for explanations

of why a correction was made on an exercise or quiz, but not for rote statement of rules. "I can say it in my own words" is a real proof of student understanding, and it too shows the realistic approach. However, the true test of value received is the next theme. I wish I could say that the mistakes taken up in class never reappear; but when they do, they are penalized more severely than the new ones not yet studied, and the percentage of such reappearance seems low. Of course the early rules must never be neglected: they are all reviewed whenever a little time is left, by oral questions, by a few sentences to correct, or merely with the remark that one or two or three people made such and such a mistake AGAIN this week! Sometimes we find examples of our points in print. There are so few notes that they can be easily borne in mind; this year six or seven themes have yielded only a dozen, an average of only two per theme. How many rules have you taken up in six weeks? Some of mine are just prohibitions or simple examples of correct usage: "the reason is that . . .," "all right," but each is numbered separately.

From time to time we vary the process by studying topics of general interest and value and need, such as letter-writing, outlining, spelling drill. The use of the reader also provides much variety. As I have mentioned, the speech aspect of the problem is the most difficult to handle. At present I

am approaching it by means of short talks, five or ten minutes long, on articles from *The Reader's Digest*, criticisms of movies (prone to degenerate into "telling the story"), or simple original exposition, whose natural order of events saves many a floundering speaker from verbal drowning. As inconspicuously as I can, in the back of the room, I note errors in grammar or usage, and take them up with the class if they are common or with the student privately if he is quite novel in his choice of pitfalls. Here is a beautiful opportunity to hold forth on the desirability of good speech, socially and in business. Some students do realize its importance, but all teachers know how slight is the carryover from the classroom to the comfortable speech of everyday living. I am wide open to suggestions on the whole topic of correcting speech habits.

At the beginning of the course and at every chance thereafter, I trundle in my conception of the aims of the class, as motivation. They are stated in as down-to-earth fashion as I can imagine, and go somewhat in this fashion:

Freshman English as I see it has two main aims, to use English correctly, in writing and in speaking, and to read intelligently and critically. Our themes, talks, grammar notes, and tests fall under the first aim, to write and speak good English. Under the second division we place all our reading, in and out of class, our attempts to criticize what we read, our efforts to understand to the fullest what the author intended to say.

All sorts of examples are filled in wherever I can think fast enough to produce them: everybody can see how useful correct usage is in writing business letters; learning to outline helps in reading large masses of material and remembering it in college; rapid and intelligent reading is helpful all one's life. Why not also remind students of the social stigma placed on those who err in speech? Everything we study is related to the original outline of the course aims, which the class copies after the introductory remarks quoted above. Subtopics in such an outline can be made to cover all the aspects of the course.

Thus I try to overcome one of the most obvious weaknesses of the functional method: its apparent lack of organization. Many students are so accustomed to clinging closely to the text while proceeding slowly through it page by page and rule by rule that they feel a little unattached when exposed for the first time to a less formalized treatment. Therefore constant care must be taken to keep the motivation and aims of the course in mind by frequent repetition. Here the all-embracing conceptions of usefulness, practicality, the needs of the student in the world he will soon enter, and so on, aid his feeling of unity in the course. It is further possible to classify the types of error committed, as under usage, punctuation, syntax, for example; while the student is not likely to recall these categories by

name, they give him a sense of organization at the time.

Another possible weak point is the weak student. If he is in a fairly good class, where the sections are not classified by preliminary tests, all his mistakes, since he is in the minority, will not usually be taken up in class, but only marked on his papers. However, even in this way he will in the course of the year doubtless commit his chief grammatical crimes and learn their correction. If he were in a classified section of weak students, he would perhaps be baffled by the large mass of necessary classroom notes, although even then they would not be as forbidding as the whole handbook. I am not fully convinced of the advisability of the functional method for such a section, although I have known at least one superior teacher who advocated it for all types of freshmen. At any rate, the weekly theme will be a point in the favor of all comers.

It has been suggested that the student may in later years encounter situations in which rules he has not studied may be needed. I answer that there is very little recall of rules as such, if they are not bolstered by constant use in writing or speaking; obviously all the regulations in the book cannot be thus emphasized. So a man or woman confronted by an unfamiliar problem in usage will look it up or ask about it, and I submit that the student numbed by too much grammar will have to do so just

as often as the student of functional English. Furthermore, this method aims to catch the most commonly misused points, and the law of averages would predict success, in a class of twenty-five people writing a weekly theme for a whole session. However, to meet this hypothetical contingency, I try, in addition to the classwork already described, to accustom the student to using his text as a reference work, and to persuade him to keep it for that use after the course. I introduce him to the table of contents, the index, the special glossary of usage, the grammar section, and explain the use of each. Whenever we take up a theme error in class, I accompany the note with a page reference.

Less than five years of practice of this method may perhaps be insufficient evidence, but I can sketch out a few tentative conclusions concerning results noticed or to be expected. In writing, more care seems perceptible in successive themes; the student is not overwhelmed by a seemingly impossible mass of rules, all of which he is supposed to apply, even though he may not fully understand or even remember them all. He has in mind the few dangers he is to watch for or he may look at his notes while writing the rough draft. With less to recall, the task seems concrete and surmountable, and so as a result he usually avoids the mistakes he has taken up in class. Another motive

for care is the fact that the fewer errors, the less grammar taken up in class—a rather definite bait.

To sum it up, the student knows he is trying to learn to write better for his own ends, after college as well as during college, and he knows he has some practical helps to this end. It seems to me that the composition has become, not a routine assignment, but a help and a challenge to make as few new slips as possible and to escape the past ones.

On the other hand the results in speech, as I have stated, are less concrete. One is more careful in class, of course, and perhaps the consciousness of taboos dwelt upon there will last awhile outside. At least the student has had his weak points called to his attention, and he has had some practice in talking to a small group, the only formal speech situation he is likely to need later. He is at all events aware of the advantages of correct speech. There is some competition here also; it is undesirable to be the one who makes more work for the class. A slight stirring of pride is almost visible: WE are the class that doesn't NEED to take up much grammar.

While I have no illusions that this system or any other is the panacea for all composition ills, I have concluded that it yields two important advantages: freedom from stultifying effects of unrelieved theory and obvious usefulness as a tool for the work of life.

Analysis of Negro Junior College Growth

GEORGE H. WALKER, JR.

The *Journal of Higher Education* and the *Negro Educational News* have published articles by George H. Walker, Jr., Dean of the Graduate School of Education and Director of the Bureau of Educational Research and Service at Texas College in Tyler, Texas.

AN analysis of the 1952 *Junior College Directory* indicates that certain changes have taken place in the growth pattern of the Negro junior college. The investigator, in an attempt to present to the interested reader a complete picture of the changes in the growth of the Negro junior college, has secured and included in this analysis data for both Conroe College of Texas and Southern Christian Institute of Mississippi for the academic year 1950-51. An objective treatment of the data is attempted below.

Number of Negro Colleges

The number¹ of Negro junior

¹With the addition of Southern Christian Institute which does not appear in the 1952 *Directory* but which is in good standing with the American Association of Junior Colleges, the number of Negro junior colleges is twenty-three. [For information about Stillman College of Alabama, see "Analysis of Negro Junior College Growth," *Junior College Journal*, XXII (November, 1951), p. 150.] The twenty-three junior colleges are the following: Alabama State College, Junior College Branch; Bettis Junior College; Clinton Junior College; Conroe N. and I. College; Dunbar Junior College; Edward Waters College; Fort Worth Business and Distributive Education College; Friendship Junior College; George Washington Carver Junior College; Immanuel Lutheran College; Lincoln Junior College; Mary Holmes Junior College; Morristown N. and I. Junior College; Norfolk Division of Virginia State College; Oakwood Junior College; Okolona College; Piney Woods College; Prentiss Institute; St. Philip's College; Southern Christian Institute; Stowe Teachers College, Junior College Branch; Swift Memorial Junior College; and Voorhees Junior College.

colleges has increased by one since last year. A new junior college, the George Washington Carver Junior College of Rockville, Maryland, has made its appearance in the 1952 *Directory*. Founded in 1950, the Carver Junior College becomes the seventh publicly controlled junior college currently listed.

A breakdown of junior colleges in terms of states gives the following distribution: Mississippi ranks first with five junior colleges; South Carolina, second with four junior colleges; Texas, third with three junior colleges; and Alabama, Missouri, and Tennessee, fourth with two junior colleges each; the remaining states—Arkansas, Florida, Maryland, North Carolina, and Virginia—have one junior college each.

Enrollments

The enrollment figures for 1952 are those covering the entire academic year 1950-51, including summer school. Again the largest total enrollment for a single state is in Mississippi with 1,149 students. This is a decrease of 225 students from the total enrollment given last year for the five junior colleges of Mississippi. The Norfolk Division of Virginia State

TABLE I
 SIZE OF JUNIOR COLLEGES AS VIEWED
 THROUGH BREAKDOWN OF ENROLLMENT
 FIGURES

Enrollment	Total	Number of Colleges	
		Public	Private
1— 49	3	1	2
50— 99	5	0	5
100— 199	4	1	3
200— 299	5	1	4
300— 399	1	0	1
400— 499	1	0	1
500— 599	0	0	0
600— 699	0	0	0
700— 799	0	0	0
800— 899	1	1	0
900— 999	1	1	0
1000— 1999	2	2	0
Total	23	7	16

College, Norfolk, Virginia, again this year, has the largest enrollment of any single institution. The enrollment of the Division is 1,134 students, which comes within fifteen students of equaling the total enrollment for the five Mississippi junior colleges.

Table 1 shows how small the Negro junior college remains in spite of the fluctuations in the enrollment pattern. Of the junior colleges with fewer than 100 students, 30.4 per cent are privately controlled; 47.8 per cent (two public and nine private) have enrollments which range from 108 students to 425 students. Three of the seven public institutions have enrollments above 900. The institutions and their enrollments are as follows: Alabama State College,

Junior College Branch, 944 students; Dunbar Junior College, 1071; Norfolk Division of Virginia State College, 1134.

Table 2 shows that the leveling off of special students is still in progress. Last year's analysis indicated that special students were 30.2 per cent of the total junior college enrollment. This year's analysis proves that special students are 17.6 per cent of the total junior college enrollment, a 12.6 per cent decline. With the exception of adult students, the 1950-51 school year experienced a decline in all classes of students. Freshman enrollment declined by 0.8 per cent; sophomore enrollment declined by 0.2 per cent. On the positive side, adult enrollment increased by 13.6 per cent.

TABLE II
COMPARISON OF JUNIOR COLLEGE ENROLLMENT FIGURES
IN CLASSES FOR SCHOOL YEARS 1950-51 AND 1949-50

Classes	Number	Percentage	
		1950-51	1949-50
Freshman	2,499	34.8	35.6
Sophomore	1,477	20.6	20.8
Special	1,265	17.6	30.2
Adult	1,932	27.0	13.4
Total	7,173	100.0	100.0

Table 3 gives adult enrollment for a period of four years. The year 1950 is the only year within the last four years in which there has been a decline in adult enrollment. Last year showed a 5.3 per cent increase; this year adult enrollment has doubled.

Number of Faculty

The twenty-three institutions have 237 full-time and 114 part-time instructors, or a total of 351 instructors as compared with the 393 instructors last year. This is an average of 15.2 instructors per institution as compared with 17.8 in 1951. The 114 part-time instructors are equivalent to 33 full-time instructors. This makes a total of 270 full-time instructors

or 11.7 full-time instructors per institution.

Accreditation and Association

Membership

Of the twenty-three institutions, seven or 30.4 per cent are accredited by the Southern Association of Colleges and Secondary Schools and one is accredited by the North Central Association of Colleges and Secondary Schools. Five of the eight accredited institutions are privately controlled, and the remaining three are publicly controlled.

Six of the twenty-three institutions are members of the American Association of Junior Colleges.

It might be of interest to the student of the junior college move-

TABLE III
ADULT ENROLLMENT IN JUNIOR COLLEGES
OVER A FOUR-YEAR PERIOD FROM 1949 TO 1952

Year	Total	Adult	Percentage of
			Adults
1952	7,173	1,932	27.0
1951	6,447	862	13.4
1950	6,347	513	8.1
1949	5,961	525	8.8

ment to know of some of the other junior college programs which are operating or have been operating for Negro youth but are not included in the *Junior College Directory*. The first of such institutions is the LaBoca Junior College of the Canal Zone. This institution was established in September, 1950, and operated for one year as a separate institution. In July, 1951, LaBoca Junior College lost its separate identity and became a branch of the Canal Zone Junior College.

The second of these institutions is the Solomon Coles Junior College.² Established in 1949, the Solomon Coles Junior College was owned and operated by the Corpus Christi Junior College District.

The third institution is the Washington Junior College of Pensacola, Florida. Supported jointly by the State of Florida and Escambia County School Board of Public Instruction, Washington Junior College, a public institution, was authorized officially in September, 1949.

²Negro students of Corpus Christi, Texas, started attending classes at Del Mar College for white students during the fall semester of 1952-53; as a result of this, Solomon Coles Junior College was closed, effective September 1, 1952, and will not be reactivated.

The fourth is a municipal institution, the Carver College of Charlotte, North Carolina, which started its activities officially in the fall of 1949.

The fifth of these institutions is the Jefferson College of Beaumont, Texas. Its opening date has been estimated as that of September, 1948. In September, 1951, Jefferson Junior College ceased operating as the Negro branch of Beaumont and became a part of Texas Southern University of Houston, Texas.

The sixth institution is the Wharton County Junior College for Negroes, Wharton, Texas, with the District and the State sharing its support. Its program of junior college education was started in 1947.

The State Teachers College of Bowie, Maryland, in the fall of 1946, made the seventh of the junior colleges by officially establishing a Junior College Division under state supervision.

The eighth of these institutions was established in 1940 by the sixty-four-year-old Virginia Theological Seminary and College of Lynchburg, Virginia, a denominational institution.

Operating Costs in Junior Colleges: 1949-50

HENRY G. BADGER

Henry G. Badger, for the past twenty years in charge of statistics of higher education in the U.S. Office of Education, has published many articles in the field of junior college finance and personnel. He is the author of *Junior College Accounting Manual* and was cited as one of thirty outstanding alumni of DePauw University, in 1952.

THE present inquiry, a successor in form and procedure to one made with data for 1939-40,¹ is addressed to three main purposes: (a) to determine, within the practical bounds set by data already on hand, the amount of expenditure per student for educational and general purposes as a whole and for resident instruction alone, at junior colleges; (b) to ascertain the proportion in which these expenditures were distributed; and (c) to note any change in these practices in recent years.

Since there is great diversity in the organization of junior colleges, it becomes necessary to make some selection of institutions in order to arrive at usable conclusions. In the present instance it seems advisable to observe the general limits set in the 1939-40 inquiry:

(1) It is usually best to limit a study of this nature to institutions of recognized standing; otherwise the findings would be of doubtful validity.

(2) The word "student" should be very carefully defined in terms widely intelligible and applicable to junior college reporting over the country.

(3) The institutions must be at

least relatively homogeneous, with differences easily discernible and measurable.

(4) Usable finance data must be available from each institution studied.

These moderate criteria are met as in 1939-40 by use of the following definitions:

(1) An institution is considered of recognized standing if it has state or regional accreditation or approval. This might eliminate some good junior colleges which have never sought accreditation, but a line must be drawn somewhere.

(2) The word "student" is here used to mean a person coming to the campus for work of junior college grade, of a generally liberal arts or terminal-occupational type. The number of such students here used is the number enrolled in the fall of 1949. This is corrected by eliminating institutions which, according to the Association's *Junior College Directory 1951*, had less than 95 per cent of their enrollment in the freshman and sophomore classes. (Elimination of all institutions with adult or special students would have reduced the number of institutions to a minimum point. At the same time, it was felt that a proportion of 5 per

¹Henry G. Badger, "Costs Per Student in Junior Colleges, 1939-40," *Junior College Journal*, XV (October, 1944), 71-76.

TABLE 1
EXPENDITURES PER STUDENT ENROLLED[†] FOR EDUCATIONAL AND GENERAL PURPOSES (CAMPUS ONLY), AND FOR RESIDENT INSTRUCTION
ONLY, 86 JUNIOR COLLEGES 1949-50 AND 71 JUNIOR COLLEGES 1939-40

Item	All Junior Colleges					Publicly Controlled					Privately Controlled				
	Number of	Expenditures per Student	Number of	Expenditures per Student	Number of	Expenditures per Student	Number of	Expenditures per Student	Number of	Expenditures per Student	Number of	Expenditures per Student	Number of	Expenditures per Student	Number of
	Junior Colleges	Students	Educational & Instructional General	Resident Instruction	Junior Colleges	Students	Educational & Instructional General	Resident Instruction	Junior Colleges	Students	Educational & Instructional General	Resident Instruction	Junior Colleges	Students	Educational & Instructional General
1	2	3	4	5	6	7	8	9	10	11	12	13			
1949-50															
Number of students															
1,000 or more	2	3,415	\$ 805	\$ 393	1	1,226	\$ 292	\$ 177	1	2,189	\$1,093	\$ 513			
800-999	2	1,772	343	173	1	814	425	231	1	958	274	124			
600-799	2	1,478	346	245	2	1,478	346	245	0	—	—	—			
500-599	5	2,747	396	206	1	545	262	141	4	2,202	423	223			
400-499	6	2,564	405	217	4	1,734	355	225	2	830	511	202			
300-399	20	7,102	545	326	11	3,886	541	369	9	3,216	549	274			
200-299	16	4,120	491	232	5	1,302	281	183	11	2,818	588	254			
100-199	30	4,367	712	347	7	889	351	236	23	3,478	805	375			
1-99	3	170	334	208	3	170	334	208	0	—	—	—			
Total or average	86	27,735	543	287	35	12,044	399	262	51	15,691	653	306			
Highest	—	—	1,697	1,148	—	—	1,446	1,148	—	—	1,697	855			
Lowest	—	—	127	72	—	—	127	75	—	—	212	127			
Regional Association															
Middle States	14	4,401	721	394	5	2,233	653	437	9	2,168	790	349			
New England	7	2,362	627	284	0	—	—	—	7	2,362	627	284			
North Central	36	12,503	528	284	21	6,569	295	183	15	5,934	785	384			
Southern	23	6,876	370	186	6	2,273	305	186	17	4,603	402	187			
Northwestern	2	626	350	254	2	626	350	254	3	—	—	—			
Western	4	967	1,070	655	1	343	1,446	1,148	3	624	864	385			
1939-40, total or average	71	26,238	164	109	54	25,275	147	105	17	2,963	306	147			

[†]As of fall 1949 and 1939, respectively.

cent or under of part-time students would not seriously affect the findings.)

(3) An institution offering sub-collegiate or summer work could not be included, as the finance data at hand did not permit segregation of accounts for these activities. Too few junior colleges offer extension service to justify including this item.

(4) Usable finance data are those on expenditures for administration, resident instruction, libraries, and plant operation and maintenance. Institutions which did not supply at least these four items had to be excluded; those which went further and supplied data on research and related activities were included, but those which included expenditures for extension were excluded.

(5) Finance reports used were those for 1949-50 as prepared by the institutions themselves or by representatives of the Office of Education who visited the institutions personally.

Screenings to meet these five requirements resulted in a group of eighty-six junior colleges, of which thirty-five are publicly controlled and fifty-one are privately controlled. In terms of regional associations these institutions are located thus: fourteen in the Middle States, seven in New England, thirty-six in the North Central region, twenty-three in the Southern, two in the Northwestern, and four in the Western region. The median enrollment for the eighty-six junior col-

leges is 263, somewhat larger than the median of 237 calculated for all junior colleges in the United States in 1949.²

The following junior colleges are included:

Publicly Controlled

California

Napa Junior College

Georgia

Georgia Southwestern College
South Georgia College

Illinois

Evanston Township Community College
Thornton Junior College

Iowa

Boone Junior College
Centerville Junior College
Emmetsburg Junior College
Estherville Junior College
Sheldon Junior College

Kansas

Fort Scott Junior College
Highland Junior College
Hutchinson Junior College
Independence Junior College

Michigan

Grand Rapids Junior College

Minnesota

Eveleth Junior College
Itasca Junior College

Mississippi

Holmes Junior College
Perkinston Junior College

Missouri

Flat River Junior College
Moberly Junior College
St. Joseph Junior College

Nebraska

Norfolk Junior College

²Unpublished data on file at U. S. Office of Education.

TABLE 2
PERCENTAGE ANALYSIS OF EDUCATIONAL AND GENERAL EXPENDITURES
(CAMPUS ONLY), 86 SELECTED JUNIOR COLLEGES, 1949-50

ITEM	Adminis- tration and general expense	Resident instruc- tion	Organ- ized Research	Libra- ries	Physical Plant oper- ation and main- tenance	Related activities	Total
I. Publicly controlled:							
A. By number of students†							
1,000 or more	8.8	60.4	—	3.1	27.7	—	100.0
800-999	6.7	54.3	—	2.0	37.0	—	100.0
600-799	4.4	70.9	0.1	1.9	22.7	—	100.0
500-599	27.5	53.8	—	3.2	15.5	—	100.0
400-499	9.9	63.4	—	3.2	15.0	8.5	100.0
300-399	10.0	68.1	—	2.3	19.2	0.4	100.0
200-299	8.4	65.2	—	3.2	23.2	—	100.0
100-199	10.8	67.2	—	3.1	18.9	—	100.0
1-99	13.9	62.2	—	5.0	18.9	—	100.0
Average all public	9.5	65.5	*	2.6	21.1	1.3	100.0
B. By Region							
Middle States	8.6	66.9	*	2.0	19.6	2.9	100.0
New England	—	—	—	—	—	—	—
North Central	9.4	61.9	—	3.2	24.7	0.8	100.0
Southern	17.7	61.0	—	3.5	17.8	—	100.0
Northwestern	7.2	70.5	—	2.2	18.8	1.3	100.0
Western	2.4	79.4	—	0.9	17.3	—	100.0
II. Privately controlled							
A. By number of students†							
1,000 or more	25.3	47.0	1.0	2.4	18.9	5.4	100.0
800-999	23.1	45.5	—	5.7	25.7	—	100.0
600-799	—	—	—	—	—	—	—
500-599	31.7	52.0	—	3.2	12.4	0.7	100.0
400-499	26.6	39.5	—	3.0	30.9	—	100.0
300-399	22.8	50.0	—	2.3	24.6	0.3	100.0
200-299	28.2	43.3	—	2.7	25.3	0.5	100.0
100-199	25.9	46.7	—	2.6	22.7	2.1	100.0
1-99	—	—	—	—	—	—	—
Average, all private	26.1	46.9	0.2	2.7	22.1	2.0	100.0
B. By region							
Middle States	26.7	44.2	—	2.4	26.1	0.6	100.0
New England	25.1	45.3	—	2.9	26.2	0.5	100.0
North Central	26.9	48.9	0.5	2.6	17.8	3.3	100.0
Southern	24.8	46.4	—	3.5	23.2	2.1	100.0
Northwestern	—	—	—	—	—	—	—
Western	24.0	44.5	—	1.0	30.5	—	100.0
III. All institutions studied:							
A. By number of students†							
1,000 or more	23.1	48.7	0.8	2.6	20.1	4.7	100.0
800-999	13.8	50.5	—	3.6	32.1	—	100.0
600-799	4.4	70.9	0.1	1.9	22.7	—	100.0
500-599	31.2	52.2	—	3.2	12.8	0.6	100.0
400-499	16.7	53.7	—	3.1	21.5	5.0	100.0
300-399	15.8	59.8	—	2.3	21.7	0.4	100.0
200-299	24.7	47.2	—	2.8	24.9	0.4	100.0
100-199	24.4	48.7	—	2.7	22.3	1.9	100.0
1-99	13.9	62.2	—	5.0	18.9	—	100.0
Average, all institutions	20.8	52.8	0.2	2.7	21.7	1.8	100.0
B. By region							
Middle States	18.4	54.6	*	2.3	23.1	1.6	100.0
New England	25.1	45.3	—	2.9	26.2	0.5	100.0
North Central	21.8	52.7	0.3	2.8	19.8	2.6	100.0
Southern	22.9	50.4	—	3.5	21.7	1.5	100.0
Northwestern	7.2	70.5	—	2.2	18.8	1.3	100.0
Western	13.6	61.2	—	1.0	24.2	—	100.0

†As of fall, 1949.

*Less than .05 of 1 per cent.

New York

Fashion Institute of Technology
New York State Agricultural
and Technical Institute, Can-
ton

New York State Institute of
Agriculture and Home Eco-
nomics, Cobleskill

New York State Institute of Ap-
plied Arts and Sciences, Bing-
hamton

New York State Institute of Ap-
plied Arts and Sciences, Buf-
falo

North Dakota

North Dakota State School of
Science

Oklahoma

Murray State School of Agricul-
ture

Northern Oklahoma Junior Col-
lege

Texas

Panola County Junior College
Ranger Junior College

Utah

Snow College

Washington

Centralia Junior College

Privately Controlled

Alabama

St. Bernard Junior College

California

College of Notre Dame
Lux College
Menlo School and College

Colorado

Colorado Woman's College

Connecticut

Larson College

District of Columbia

Mount Vernon Junior College

Georgia

Brewton Parker Junior College
Reinhardt College
Young L. G. Harris College

Illinois

Kendall College
Morgan Park Junior College
St. Bede Junior College

Iowa

Graceland College
Grand View College
Northwestern Junior College

Kentucky

Caney Junior College
Lindsey Wilson Junior College
Sue Bennett College

Massachusetts

Becker Junior College
Cambridge Junior College
Lasell Junior College
Pine Manor Junior College

Michigan

Spring Arbor Junior College

Mississippi

Wood Junior College

Missouri

Christian College
Cottey Junior College
Kemper Military School
Stephens College
Wentworth Military Academy
William Woods College

New Hampshire

Colby Junior College for Women

New Jersey

Centenary Junior College

New York

Bennett Junior College
Cazenovia Junior College
Concordia Collegiate Institute
Finch Junior College
Paul Smith's College of Arts
and Sciences

North Carolina

Belmont Abbey College
 Louisburg College
 Mars Hill College
 Pfeiffer Junior College

Oklahoma

Bacone Junior College

Pennsylvania

Keystone Junior College
 York Junior College

South Carolina

Spartanburg Junior College
 Voorhees School and Junior College

Tennessee

Christian Brothers College

Texas

Hockaday Junior College

Vermont

Green Mountain Junior College

Virginia

Sullins College

These eighty-six institutions constitute 13.8 per cent of the 621 junior colleges in continental United States in 1949-50, as shown in the *1951 Junior College Directory*. This small proportion is due more to the application of criteria (2) and (3), above, than to criteria (1), (4), and (5). Many junior colleges, thoroughly accredited, rendered usable finance reports for 1949-50. A large number of these, however, offered such a varied instructional program that their student enrollment could not be reduced to a usable common denominator.

Conclusions

From the data at hand, the following conclusions seem warranted, always keeping in mind any

reservations necessitated by the small size of the sample:

(1) The dominant factor in junior college costs per student appears to be control rather than number of students enrolled. Table I shows that privately controlled junior colleges spend more per student for the educational and general total than do publicly controlled junior colleges in the same size group. For resident instruction costs only, the same general tendency is observable except in the 300-399 and 400-499 groups, where publicly controlled schools report a higher cost than do those under private control. This may be due in part to the selection of institutions. It should be emphasized again that the data here surveyed are those from *all* junior colleges meeting the criteria stated earlier in this paper.

(2) Regionally, the junior colleges in the Western and Middle States spend the most per student. The least amount per student is spent in the South and the Northwest.

(3) Resident instruction is given a greater proportion of expenditures in public than in private junior colleges (Table 2). How much of this difference is due to locational factors, with most of the public institutions operated as parts of larger schools systems and many of the private institutions operated alone, and how much is due to differences in accounting practices is not determinable from the data at hand.

The largest proportion of expenditures going to resident instruction is found in the institutions enrolling at least 300 but fewer than 800 students.

(4) The basic overhead accounts (administration and physical plant operation and maintenance) run proportionately higher among private than public institutions, among those enrolling 200-299 students than those of other sizes, and regionally in the New England

area than elsewhere. This regional differentiation may easily be connected with the fact, shown in Table 1, that all the junior colleges studied in the New England area are privately controlled.

(5) A comparison of the data for 1949-50 with those for 1939-40 shows that costs per student have apparently increased quite sharply during the ten-year period. This is shown in the following tabulation:

Item of expenditure per student	Junior colleges by control	
	Public	Private
All educational and general (except extension):		
1949-50	\$399	\$653
1939-40	147	306
Increase: Amount	252	347
Per cent	171.4	113.4
Resident instruction:		
1949-50	\$262	\$306
1939-40	105	147
Increase: Amount	157	159
Per cent	149.5	108.2

This increase, however, is more apparent than real; the Consumers' Price Index has increased 69.1 per cent from 1940 to 1950. In order to appraise correctly any increases in expenditures during that period it is necessary to take this increase

into consideration. A simple procedure is to multiply the 1939-40 figures by 1.691 and compare the resultant figures with those actually reported for 1949-50. This gives the following:

Item of expenditure per student	Junior colleges by control	
	Public	Private
All educational and general (except extension):		
1949-50	\$399	\$653
1939-40 (adjusted)	249	517
Increase: Amount	150	136
Per cent	60.2	26.3
Resident instruction:		
1949-50	\$262	\$306
1939-40 (adjusted)	178	249
Increase: Amount	84	57
Per cent	47.2	22.9

(6) The data also indicate an increasing proportion of expenditure for administration and for related activities during the ten-year period. Thus, in 1939-40 the institutions studied spent 10.6 per cent of their funds for administration; those studied for 1949-50 spent 20.8 per cent of their funds for

this function. In like manner, related activities took only 0.7 per cent of the 1939-40 total, but 1.8 per cent of that for 1949-50. Plant operation and maintenance also increased from 18.6 per cent of the 1939-40 total to 21.7 per cent of that for 1949-50.

Marriage Education in the Junior College Curriculum

HENRY NATUNEWICZ

Head of the Department of Social Science at Bay Path Junior College in Longmeadow, Massachusetts, Henry Natunewicz has done extensive research in courtship patterns and marriage education, both from the sociological and from the geographical standpoint.

THE ultimate aim of education as viewed by this writer is the preparation of a person for a career of his choice. Career, however, usually carries a two-fold meaning which consists of: (1) occupation or job whose primary purpose is to provide the means of economic subsistence, and (2) marriage and family living which has for the main purpose the provision of more complex personal and social satisfactions. The first of these career components is also referred to by such terms as "profession," "vocation," "trade," "skill," and others. Though the distinctions among them are often semantically vague and overlapping, these terms connote a certain degree of pride based on competence, and they represent labels for some particular types of specialized training. On the other hand, marriage is in most cases rarely treated with such precise educational implication, even though generally it demands much more all-round ability and adaptation to specific situations of a highly complicated nature.

A simple comparison will illustrate the point. It takes three years of college and three years of law

school to prepare one for the bar; four years of college and four years of medical school (plus a year or two of internship) to become a qualified doctor; a college course plus four or more years of theological training in preparation for the clergy; a combination of college and professional study usually adding up to five years to qualify for teaching, etc. A few years of apprenticeship are needed to acquire the proper experience for a journeyman or other bona fide member of trades such as carpentry, plumbing, masonry, etc. Clerical, semi-skilled, custodial, and even unskilled occupations have desirable prerequisites which are obtainable through some educational media. And all these occupations require not only the factual knowledge of information, but also the concomitant inculcation of skills and attitudes necessary for successful performance of work.

But how about marriage? Is it not a career of the highest order, a most worthwhile occupation? Would it not be desirable to give it the status of a profession? Couldn't more people benefit from increased skill and competence in carrying

out its many complex functions? And how does the junior college fit into this pattern?

It will be recalled that one significant type of junior college development was brought about by the extension of the public school system into the sphere of higher education. The most obvious example of this stage of its evolution is to be found especially in California. However, it is well to be reminded that the whole public school system grew out of the necessity for providing educational services which were originally relegated to the home, family, and church. Thus the state took over a large part of the family's burden and has in general performed its educational functions more efficiently than the family was able to do.

In earlier times one's lifetime career or occupation was learned in the home. The father taught his sons his trade, while the mother taught her daughters to become housewives. A girl in those days had some sound and practical training in managing a household. That management was what society expected of her, and her home training was adequate in fulfilling this expectation. She could cook, sew, take care of children, and otherwise minister to a man because she had had concrete practice in these arts (except in the biological function of sex, where though she might not have had practice, she had definite training in the attitude that she was to give herself completely to her husband

in this respect). There was probably considerably less maladjustment in marital matters because the partners had learned to accept each other's roles, namely, the husband's dominant part as the breadwinner and the wife's more submissive role as the household administrator.

In the course of human progress a new trend was taking shape. Expectations of society were changing, but preparation to meet them was not keeping pace with their needs. Religious training was largely taken out of the home and given over to the church. Occupational training was taken out of the home and delegated to the schools and colleges. Marriage training was taken out of the home (period). Its functions were haphazardly scattered and distributed in uncoordinated segments among the home, church, school, and especially the more informal but highly effective agencies of education such as the neighborhood play group, gang, and media of communication to the masses (i.e., magazines, movies, radio, and now television). This distribution of functions took place by default; that is, it was subtle, unconscious, automatic, and inevitable simply because no provision was made for it in the formal education pattern. It is said that nature abhors a vacuum, and the vacuum created by taking marriage out of education was filled with other material of far less value and human usefulness.

The pseudo-moralists who argue against formal education for marriage and family living rationalize their assertions by stating that this subject is a sacred one which must be left to one's home and religious training. Why then have the home and the church failed to train young people efficiently? Many reasons can be advanced. In the first place, people spend considerably less time at church or home than they do in school (this does not include time spent in sleeping at home, or, for that matter, in church).

The effectiveness of learning acquired in a formal educational milieu outside the home or church has been sufficiently demonstrated. This learning is not restricted to classwork and homework; it includes the total social environment of an educational community such as the junior college. Courtship patterns developed at college seem much more dominant than those developed at home, though the difficulty of compiling valid scientific data on this point prevents its factual verification. All in all, the educational framework of a junior college is far more conducive to learning than is the home or church. And the community college type can even utilize resources of the church and home on a cooperative basis to great advantage.

Since public junior colleges are often handicapped by antiquated state laws, attention may be centered on the private junior college, especially one for young women.

This type of college evolved from the seminary or finishing school for girls, and it can readily incorporate marriage education in its curriculum because its main purpose is often to train a girl for the career of a housewife. A home economics major program can be set up to achieve this objective and to cover the practical aspects of homemaking. The more intangible human aspects can be dealt with in a good Sociology of Marriage and the Family course. The primary function of this social science viewpoint would be to straighten out distorted ideas and to help unlearn unfavorable attitudes. Then new constructive learning would be facilitated on a sound basis.

The junior college is ideally qualified for this all-important task. Marriage is a lifetime career and occupation. The hands of the public school system are tied, and the four-year colleges and universities are too busy preparing young people for occupational careers. The limited size and personalized atmosphere of the private junior college for young women offer the opportunity for developing high standards of quality in preparation for marriage and parenthood, especially where a sound psychological testing and counseling service is available. Some educational agency must take over the functions which the family has neither the time nor the competence for teaching effectively. The emancipation of women emphasizes this

point even more. There has been too much learning of "dating" behavior and not enough learning of "mating" behavior. Education has lost sight of some of its more practical goals and ends by not train-

ing people for marriage as a universal career. Let the junior college take the lead in giving marriage and family living the standing of a true profession of the highest qualities.

Mathematics for One and Two Year Terminal Business Programs

W. O. BUSCHMAN

A contributor to *American Mathematics Monthly* and to *School and Society*. W. O. Buschman has had teaching experience in both high schools and junior colleges. At present he is Instructor at the Portland State Extension Center, Portland, Oregon.

THE proposals presented in this article cover only one and two year terminal business programs. Since the purpose of the terminal programs is to train the student for a specific task and to make him proficient at that task in the minimum length of time, it is important to omit all unnecessary material and to include only those topics essential to the student's training. Because of the limited amount of time available in such programs, it may be advisable to develop the essential mathematical skills and concepts without special mathematics courses. These skills may be better developed in other courses where they are to be applied.

Many business students omit mathematics from their program altogether because of a lack of background in fundamental mathematics or because of the belief that mathematics will be of no use to them in their chosen field. An intensive course such as the usual Mathematics of Finance or Mathematics of Investment requires too much time in building up an adequate mathematical background to be suitable in a terminal program. Accounting, taxation, insurance,

and many other topics of business need an understanding of some of the fundamental topics of mathematics. For this reason, it is not in the student's interest to omit all mathematics, but his needs may be better served in ways other than the usual Business Mathematics courses.

Most colleges which offer business training include courses in mathematics especially designed for the business student, such as Mathematics of Finance (or Mathematics of Investment which is essentially the same) and Statistics. These courses are generally taught by the mathematics department, with emphasis upon computational procedures, derivations, and the like. This type of program is not to the usual business student's liking and will not serve his best interests.

In many schools the program results in the business mathematics courses being given by graduate assistants or by others who are not vitally interested in them. Generally the mathematical principles, rather than the functional aspects, are emphasized in such a course. This emphasis serves no practical

purpose for the business student who is not interested in mathematical derivations and concepts but only in the applications of such principles and concepts.

In the field of general education there has been a trend in recent years toward consolidation of the various science courses. In some schools this takes the form of two basic courses: Foundations of Physical Science and Foundations of Biological Science. Where these basic courses are given, mathematics is usually a separate course, though some of the applications may be taught in the science courses. In other schools, this integration of courses has been carried even further, both science courses being combined into a single course. The mathematics needed is taught within the science courses themselves.

The above plans may point the way for a method of handling the mathematical concepts needed in the business curriculum. Frequently, claims have been made that the student does not transfer the methods and concepts of mathematics to other courses and apply them in those fields. Perhaps what may be needed in these programs is the enlargement of other courses to include the needed mathematical topics and skills rather than a separate mathematics course. For example, the arithmetic fundamentals which are needed for the accounting courses can be omitted if not needed. This review, if taken in the accounting course with ac-

counting applications, will be more meaningful to the student; he will as a result be more interested and better able to apply the mathematical principles concerned.

Statistics, frequently given in business programs, is commonly separated by several terms or more from its prerequisites. This gap means that relearning is necessary; in a terminal program there is not sufficient time for this process. Most students who encounter statistics will need to interpret data, rather than to compute it. Applications and interpretation can be made more meaningful if taught in connection with economics or other courses in which the data are encountered. In general statistics courses many applications are taken from the fields of psychology, education, etc., fields which are of little or no concern to students in a terminal business program.

In a terminal program the mathematics should be brought into any course where it is needed. In this way the student will see and learn the applications of principles which otherwise will be useless abstractions. Many of the common topics of a course in business mathematics could be included in other courses as follows: a review of arithmetic fundamentals included in the accounting course if needed; problems of taxation and credit buying in other courses dealing with business problems and marketing; cash discounts in marketing and retailing courses; and mathematics of insurance (the var-

ious kinds used by the small business man) in store management courses.

One of the disadvantages of a program of this type is the difficulty of transferring to a four-year program or to other schools. The difficulty of evaluating credits for transfer could be overcome as at least one school has done in its science program by listing the mathematics credits separately on transcripts; i.e. three units in accounting, two in mathematics.

Another difficulty is the availability of properly trained teachers to give these combined courses. If good teachers are to be obtained, they must be given the same opportunities for advancement as those in the four-year programs. Otherwise the quality of instruction will suffer, and the terminal programs will be used only to gain experience; instructors will move

on to other positions as rapidly as possible. The program will be doomed from the start unless adequate provision is made for advancement.

One advantage of this plan is better correlation of material. The applications and uses of the topics studied are presented in a more meaningful manner, and the repetition of similar material in several courses is avoided, thus saving time, an important factor in a terminal program.

This plan could be extended to courses other than those mentioned here, thus avoiding the compartmentalization of material. This extended program would provide a better integration of material and would result in the student's learning to apply the many broad principles, thus contributing greatly to his preparation for future employment.

Some Aspects of the Status of Junior Colleges in The United States

Editor's Note: The following reports on the status of junior colleges in various states are a continuation of a series which the *Journal* began last year. From time to time the *Journal* will bring further reports on the status of junior colleges.

Connecticut

EARLE M. BIGSBEE, Dean of the Junior College of Connecticut of the University of Bridgeport

IN THE State of Connecticut a junior college must obtain a charter by an act of the Legislature. This act, however, does not confer the privilege of granting a degree to the institution. After the college has been in operation at least a year, it is inspected by a committee from an organization consisting of all the junior colleges and colleges within the State. The committee inspects the institution and reports its findings to the State Board of Education, which in turn has the power to grant the authority to confer the Associate Degree. The State Board of Education is not bound to accept the recommendation of the committee. The law does not provide definite standards for admission requirements, graduation requirements or credential requirements for junior college teachers, although all of these factors will be taken into account by the inspection committee. It is difficult to state the articulation policies of the junior colleges in Connecticut. They are all private institutions and vary a great deal in character. All of them except one provide adult education.

There is a professional organization of junior college faculty and administrators in this State called the Connecticut Conference of Junior Colleges.

At present there is no pending legislation. The most probable development in the junior college field in the State would be a system of state-supported junior colleges in the populous centers of the State.

Iowa

WALTER B. HAMMER, Dean, Estherville Junior College, Estherville, Iowa

ESTABLISHMENT of a public junior college in Iowa is dependent on several factors: (1) The school district must have a population of at least five thousand; (2) the vote in favor of such authorization must be equal to at least 60 per cent of the total vote cast; and (3) the move must be approved by the state superintendent of public instruction. The college may offer one or two years of work. Financial support comes from tuition, fees, tax revenue from the local district, and state aid amounting to twenty-five cents per day for each college student registered for twelve or more semester hours of work.

Standards for junior colleges are determined by the Department of Public Instruction and the Iowa

Committee on Secondary Schools and College Relations for Iowa Public Junior Colleges. Admission requirements for students entering a junior college include graduation from an accredited high school. While no specific pattern of high school subjects is uniformly required, it is recommended that the applicant have at least three units of English, two units of mathematics, two to four units of social studies, and two units of science. Students who receive the Associate of Arts degree upon graduation from a junior college are required to have sixty semester hours of academic credit, with a 2.00 point average.

All instructors must hold an Advanced Secondary Certificate and a master's degree with a major or minor in the area to be taught.

Many Iowa public junior colleges function under the same administrative head for the college and the senior high school. In a few instances a dean serves the college and a principal the high school. Many instructors on junior college staffs teach one or two classes in high school. Both use the same library, classrooms and laboratory facilities in many systems.

Since the Iowa Committee on Secondary School and College Relations is composed of the registrar and one other faculty member from Iowa State College, Ames; Iowa State Teachers College, Cedar Falls; and the University of Iowa, Iowa City, there is little difficulty for students on the university-par-

allel curriculum to transfer to the senior college.

Adult education programs are developing rapidly. These programs deal with a variety of courses running the gamut from playing bridge to studying Great Books. Two of the better adult education programs are to be found in Mason City and Burlington.

All public and private coeducational junior colleges in the state, nineteen in number, are members of the Iowa Junior College Association. Present officers are Clifford Beem, Mason City, president; James Loper, Muscatine, vice-president; Carl E. Thorson, Eagle Grove, secretary-treasurer and Edwin J. Aalberts, Northwestern Junior College of Orange City and Walter B. Hammer, Estherville, members of the executive committee. At least three meetings are held each year, two of which are open to all instructors working at the college level.

Iowa junior colleges, through a series of workshops the past five years, have developed a statement of advocacy for post-high school educational needs of Iowa's youth. This statement proposes the establishment of junior college districts embracing several contiguous high school districts, tuition free, with stress on terminal courses in technical and vocational education. At present a committee is working on a Minimum Foundation Program for Iowa's schools recognizing the public jun-

ior colleges as an integral part of the program.

Massachusetts

GLADYS JONES, President, The Garland School, Boston, Mass.

THE junior college movement in Massachusetts has followed a different pattern from that of other states, for all but two of the junior colleges granted the right to use the title, Junior College, by the Massachusetts Board of Collegiate Authority are private, non-profit institutions, administered by self-perpetuating boards of trustees. The two publicly supported junior colleges were established to meet the needs of high school graduates of their respective communities. Several of these private institutions are degree granting, while others either have not asked this privilege of the Massachusetts Board of Collegiate Authority, or prefer not to grant the degree.

The colleges differ greatly in physical plant. Many of them have beautiful campuses with every recreational and physical education facility, and others are city colleges offering wide cultural opportunity through ready access to museums, libraries, concerts, and the theatre. One of the interesting aspects of the Massachusetts junior college movement is the wide variation of purpose, and yet the maintenance of high academic standards. The administrative bodies of the colleges report that their graduates achieve success on

transfer to the senior colleges or specialized schools.

The non-profit, privately established junior colleges are supported by tuitions, gifts, or endowment, receiving no state or federal aid. The public junior college is supported by tuition fees and public funds.

The admission requirements of these colleges vary slightly, but the usual standard is graduation from a recognized private or public secondary school, and at least fifteen units of credit with acceptable grades. Entrance examinations are not required. Degrees granted through the authority of the Massachusetts Board of Collegiate Authority are the Associate in Science Degree, and the Associate in Arts Degree.

The standard for a junior college faculty in Massachusetts is well expressed in the Constitution of the New England Junior College Council:

"The faculty of an institution should consist largely of instructors whose primary interest is sound and inspiring classroom teaching, rather than research. In the strictly academic field the faculty should show a high percentage of instructors whose formal education includes at least one year of graduate study beyond a baccalaureate degree. Members of the faculty, teaching technical or other courses in a highly specialized field requiring a high degree of skill or creative ability, should have a back-

ground of training and experience which will be readily recognized as equivalent to the academic preparation of faculty members teaching the academic courses.

"The ratio of the number of students to the number of faculty members, above the grade of assistant, should not exceed twenty to one."

It has been the general policy in Massachusetts to have the junior colleges established as separate institutions with their own buildings and faculties.

When the independent junior college in Massachusetts is so situated that it can render service to the community, adult education programs are offered. Bradford Junior College is doing a particularly interesting program in child study, having established a nursery school, and is offering to parents participation on a cooperative basis in both the teaching and the operation of the pre-school. The adult education program has been well established in Boston and Cambridge and in the Newton and Brookline public school systems so there is less opportunity for the junior colleges in these areas to

develop community college activities or to offer adult education programs.

Through the activities of the New England Junior College Council, administrators and junior college teachers have an opportunity to participate in conferences. The junior college faculties are welcomed into such associations as: The American Chemical Society, College English Association, Eastern Arts Association, American Home Economics Association.

There is no Massachusetts Association of Junior Colleges. The New England Junior College Council is the functioning body.

The trend toward increased registration in the junior colleges was noted at a recent meeting of the New England Junior College Council, and it was recommended that the independent junior colleges consider ways in which their facilities could be expanded to take care of the anticipated large enrollment after 1956, or that they participate actively in the establishment of new junior colleges in the area so that standards acceptable to the New England Junior College Council would be maintained.

The Junior College World

JESSE P. BOGUE

STUDENT government is a theme of increasing interest among junior colleges if we may believe the reports and editorials in student papers. In Texas there is, among students, a very healthy program underway whereby representatives of student councils meet together in districts. Essentially, it is a greater movement for good citizenship. The idea back of the program is that good student citizenship is the beginning of all good citizenship; that responsibility and participation on the part of students is far more effective in producing the good citizen than mere courses of study, important though these may be.

One outstanding feature of student government is the increasing attention to the system of honor. The upshot of editorials on this subject written by student editors is simply that honor on the part of those in the college community is self-government. The *Western Graphic* of Colorado Women's College at Denver, for December 12, carries an interesting story about self-government in the nursery school conducted on the campus of the college. The fifteen children enrolled in the school are all four-year-olds. In the school group discipline, whereby the children learn to live, work and play together, is used. The children are expected to discipline themselves. Mrs. Randolph, the director, states that if

children throw sand, they leave the sand box because they remind themselves that this is the penalty and do not have to be told by the director to leave. She says, "This is student government on a four-year-old level."

Briarcliff Junior College, Briarcliff Manor, New York, recently published a six-page folder entitled, "The Honor System at Briarcliff." Each student is on her honor to abide by all the rules and regulations governing every aspect of student college life and to take an active part to insure observance of the honor system. Its provisions are enforced by the entire community of the college—both students and staff.

Orange County Community College, Middletown, New York, is conducting the first experimental nursing program designed to educate nurses in two years. This program is the first to be conducted under a grant for this purpose made to the Division of Nursing Education, Teachers College, Columbia. It is reported that a great deal of spade work had to be done to secure permission to attempt the experimental program. The coordinator at Orange County is Miss Mary D. Mansfield. Dean Walter Singlinger of the college is on leave of absence to handle much of the field work for the experimental program for Teachers College. Nursing students in this new endeavor are regular

enrollees in the college in a training program which has been reduced from three to two years. Upon graduation they will be awarded the associate in applied science degree and be eligible to take the R. N. examinations.

Clinical experience is being obtained in hospitals. The county medical society is cooperating with the college. The State University of New York is making its resources available to the college for advisory services. The program for the first year, according to President E. H. Miner, is: Communication Skills, 6 hours; Survey of Science, 6 hours; Science of the Human Body, 3 hours; Human Relations, 6 hours; Fundamentals of Nursing, 6 hours during the first semester; Health Problems for Mothers, Infants and Children, 6 hours in the second semester. During the second year it is planned, at present at least, to offer the following program: Community Problems, 6 hours; Clinical Nursing Science I and II, 12 hours each semester; elective 2-3 hours each semester.

It is likely that, in the next year or so, additional programs will be started in other sections of the country. The experimental program is being watched with interest. Its success could mean almost a revolution in nursing education, it is said by those who believe that the training time for nurses may be reduced by at least one-third.

Cumberland College, Williamsburg, Kentucky, hails the proud

record of seven members of the faculty who have a combined achievement of more than 250 years of teaching and administration in this college. This record was fittingly celebrated at a recent homecoming when alumni presented each member of the group with a loving cup suitably engraved for the occasion. The speaker at the banquet, tendered in honor of the seven faculty members, was The Honorable Bert T. Combs of the Kentucky Circuit Court of Appeals and an alumnus of Cumberland College.

President Emeritus J. L. Creech, now a member of the faculty, taught at Cumberland for twelve years before assuming the presidency in 1925. He retired from the presidency in 1946. In 1931, under his leadership, the college was fully accredited by the Southern Association of Colleges and Secondary Schools. A. R. Evans has served the college a total of forty years as a teacher and for two years as acting president. P. R. Jones has been on the faculty since 1909. He is now head of the Chemistry Department and dean of the college. J. T. Vallandigham, head of the Department of Mathematics, began his career as a teacher at Cumberland in 1913. Miss Besse M. Rose, head of the English Department, has been on the faculty since 1912. Dr. Nell Moore, head of the Music Department, has been a member of the faculty since 1922. Miss Mary Thomas, head of the History Department, began her work in 1929.

It is reported that the solid core of the present faculty is made up of these loyal members and that they are still going strong in their work.

Reading, 'Riting and Ranching is the caption of a well-illustrated feature article in the San Antonio Express Magazine, San Antonio, Texas, November 30, 1952. It concerns the Schreiner Institute of Kerrville, Texas, with spreads of pictures covering most of five pages. The more immediate reason for the story is the ranching course of study instituted at the suggestion of Dr. Andrew Edington, President of the school. "We feel that Schreiner is peculiarly equipped for handling the ranching course," Dr. Edington stated. "We already have facilities for some phases of the course, but most of all we are located in the very heart of a section of Texas which offers a widely diversified ranching and stock farming program." It is further stated by Edington that the boys at Schreiner have an opportunity to come in contact with all kinds of ranching and farming, that they are receiving the help and cooperation of practical ranches in the new course of study. One of the reasons for the ranching course is the necessity of having young men ready to take the places of the old timers who had to learn ranching the hard way, often with its expensive and wasteful mistakes. The newer type of rancher will come to his job with a fund of knowledge learned in the classroom, the lab-

oratory and on the ranches and thereby will avoid trial and error methods which come by experience and rule of thumb.

Schreiner is a junior college for men, enrollment about 300, under the auspices of the Presbyterian Church. Military training is a part of the educational program. The school was established in 1924 and is fully accredited by the Southern Association of Colleges and Secondary Schools.

Students Earn Over \$3,000 a Week at Coffeyville, Kansas, Junior College, according to a survey of employment made recently by the editors of *The College Dial*, student paper. The survey made by the students shows that more than 69 per cent are working from three to forty-four hours per week. Earnings range from \$1.60 to \$55 per week with an average income of \$21.36. Approximately one-half of the students stated that it was necessary for them to earn money in order to remain in college. Most of the jobs are in offices, merchandising and unskilled labor. Somewhat similar reports have been received from many colleges in various sections of the country. In addition to the assistance which students receive by way of incomes from employment, their work adds a productive force to the life and economy of the local community. A number of colleges have from time to time made surveys of the monetary contribution made by their students to their local communities. These studies include the

money students spend with local merchants, for entertainment, travel, etc. Some studies of locally-controlled junior colleges run estimates of the money saved by students and their parents by living at home. Others include all three phases of the contribution: money saved by living at home while attending college, the money spent locally by the students while in college and the money earned by them by means of employment.

The Yodler, student paper of Anderson College, Anderson, South Carolina, has been awarded All-American rating by the Associated Collegiate Press for its second semester issues for 1951-52. This is the ninth time *The Yodler* has won this honor. Special recognition was given to breadth of coverage, careful editing, headings with sparkle and variety, good front page make-up and an effective sports page. The student paper is only one reflection of the high quality of work done by students at Anderson under the presidency of Dr. Anne D. Denmark, who will retire at the end of the present academic year after twenty-five years at Anderson. Dr. Denmark will be succeeded by Dr. Elmer F. Haight, professor of religion and chaplain of Furman University since 1944. Dr. Haight recently said, "I was surprised when I was approached in regard to assuming the presidency of Anderson College, but I am looking forward to devoting the next years of my life to the cause of Christian education in our

Baptist Junior College at Anderson."

Rochester Junior College, Rochester, Minnesota, has made it a practice for several years to give the fullest possible cooperation to all other units of the public school system in observing American Education Week. This past year the college put on a radio broadcast written from student comments in the classrooms and constructed an interesting window display at one of the most frequented locations in the city. The display had pictures of the 1951 graduating class and featured red strings running from the students' photos to the various places on a map of the United States where the graduates are now located. At the college open-house which was held for parents and citizens Dean Roy Goddard addressed the group on "Today's Concept of the Community College." Goddard also addressed a citizens' meeting in the Mayo Civic Auditorium on "Crises in Education." In the course of his address he said, "There is no reason why the judgment of a trained, well-qualified teacher should be questioned any more than there is that the judgment of a doctor, lawyer or any other professional person should be."

Community Education Program is the title of an eight-page illustrated folder published by Virginia Junior College, Virginia, Minnesota, and sent to the citizens of the community. The sub-title is, "Continuous Education for Effective

Living." The pamphlet outlines the courses of study for the evening classes and gives quite complete information for the guidance of the reader. Accounting, applied psychology, advanced typing, citizenship, current issues in international relations, men's financial forum, Russian Politics at Home and Abroad; courses in various arts and crafts such as painting, upholstering, carpentry are offered. There are courses in electricity, machine shop, welding, and similar work for men. The "Community Education Program" is published twice each year and is an attractive piece of literature for promotional and informational purposes.

Your Community College Re-

ports is the title of the monthly publication put out by Compton College for the people of the community. It is done in two colors, well-illustrated, and makes use of plenty of white space. The November issue, for example, played up the part students were taking in the presidential campaign — how they studied the issues and candidates, held an election and entered into practically all phases of a campaign and election in which they will engage as adults. This issue has a display of nine pictures. One student said in respect to the campaign and election: "I believe I have learned more this year about politics than ever before. I take a great deal more interest in class now."

From the Executive Secretary's Desk

JESSE P. BOGUE

IN THE January issue of the *Washington Newsletter* we expressed some convictions in the back page editorial about the theme for the national convention meeting this month in Dallas, Texas. That theme is: The Junior Colleges — Their Integrity, Freedom and Democracy. In terms of its timeliness, it could not be improved. In many respects it is the issue today facing not only junior colleges but all education. In some ways it is of paramount importance to all institutions of higher learning.

On the *Desk*, January 7, 1953, is the *Washington Post*, independent daily which usually gives strong support to the Federal administration. Book Burning is the subject of an editorial. It deals with the avowed purposes of Senator McCarthy and Congressman Velde to investigate American colleges and universities. "The investigation of American colleges and universities," so runs the editorial, "projected by Senator McCarthy and Representative Velde presents those institutions with magnificent opportunity to accomplish some most important adult education. We hope the opportunity will be grasped—affirmatively and forcefully—to explain to the American public the real nature and the real social utility of academic freedom." Much of the program for the national convention is designed to do just that. In concert with the

teachers of the Texas Junior College Teachers Association, by presentations from persons of outstanding ability, and by discussions in groups the convention should come to some conclusions concerning the wisdom and prudence of affirmative positions to be taken and maintained. The issues cannot be ignored nor allowed to go by default. The colleges and educators cannot afford to be pushed into a corner for defensive action. They must be forthright, positive and courageous enough to stand by their convictions.

The editorial continues, "Neither Senator McCarthy nor Representative Velde nor any other member of Congress for that matter, has any special qualifications for investigating American colleges. These investigations amount, in substance, to a species of book burning. They ought to be resisted on principle—as fiercely as the burning of books would be resisted, and with as little reference to the merits of the individual teachers to be purged as would be given to the merits of the individual books to be burned. Educators are peculiarly the trustees of intellectual freedom. It is this freedom itself that is now imperiled and this trusteeship that they are now called upon to vindicate."

There is not the slightest implication in the editorial nor in the position of American colleges that

a propagandist for any particular 'ism in the classroom should be tolerated. The question is merely one of the freedom of well-qualified teachers to present all sides of problems in the respective fields in which they are qualified to teach. It is a question of the freedom and responsibility of teachers to study every phase of their subjects, to present the facts with supporting evidence, and thereby to stimulate students to think with clarity for themselves and to arrive at mature judgments. It is this *process*, this educational procedure, which could be called in question by investigations. On the nature of the educational process—the freedom to study and present all sides of all questions—and to encourage freedom of thought depends all other freedoms guaranteed to citizens in the Bill of Rights. If freedom to teach is strangled in the schools and colleges, how can freedom of the press, of religion, of assemblage and freedom to petition for redress of wrongs be maintained? If the freedoms provided for in the Bill of Rights are set aside or limited beyond reasonable boundaries, what kind of an American way of life will be left to the citizens?

The integrity of the colleges and their teachers is a necessary corollary to the whole concept of freedom. Freedom is a condition in society created by people who have the moral and intellectual qualities to make it possible. This is one reason why the American people

are investing enormous sums in the free educational system. It is one reason why citizens often provide for education in independent or church related educational institutions. The purpose is to create in the youth of the land the knowledge, understanding, appreciations and skills by which they may become independent and self-reliant citizens in a democratic society. Freedom, therefore, is not taken for granted. Americans know that it must be achieved. It is expensive and calls for much sacrifice for the plain reason that conditions of integrity and morality are part and parcel of freedom. Hence, the convention's theme stresses the necessity for integrity, reliability and responsibility on the part of educators.

Those who believe in freedom to teach know that sound judgment is required in its exercise. Words must be weighed by careful consideration of all the factors involved. The theory of the "imminent and present danger" propounded by Chief Justice Holmes should inevitably come within the consideration of all who teach and speak. It is our contention that this kind of refined thoughtfulness and good judgment cannot and does not result from oaths administered to anyone in education, nor from investigations by politicians. It comes, if at all, from the processes of free inquiry, free discussion, the give and take of students and citizens engaged in the task of finding the right answers to the

problems of life. It comes, as Dr. Robert M. Hutchins explained to the Cox committee of Congress, "as a kind of continuing Socratic conversation on the highest level for the very best people you can think of, about the most important questions, and the thing you must do to the uttermost possible limits is to guarantee to those men the freedom to think and to express themselves."

* * *

Manpower in the Present World Situation is one of the most critical and most discussed problems in present-day American circles. Almost without a single exception the meetings of the Committee on Relationships of Higher Education with the Federal Government of the American Council on Education become involved in this problem. It is especially critical now and probably will be for many years to come by reason of the fact that America and the western world are faced with great masses of potential enemies — numbers which the western democracies cannot expect to match. The solutions, therefore, seem to be in the direction of higher efficiency in every respect on the part of America and her allies.

In determining this efficient society, discussions usually turn to a consideration of the scientists and technicians. Many of the proponents of special consideration for engineers and scientists are usually from universities and schools of engineering. Students in these

fields of study, they contend, should be deferred from military service until they can complete their courses of study. Industrialists claim that they cannot produce the material demanded by the military and civilian economy unless they receive a considerable percentage of the graduates in science and engineering. The question arises at this point concerning the wisdom of all young men's serving in some sort of military capacity. Is it safest for the Nation that they should? On this point much of the universality of military service breaks down.

In most of the discussions one gathers the impression that the great universities and schools of technology are the producers of our best scientists. *Origins of American Scientists* by Knapp and Goodrich, University of Chicago Press, tells a different story. "The average American scientist is apt to be from a lower-middle class family somewhere in the Mid or Far West, and a graduate of a small, medium-cost liberal arts college that placed intellectual achievement above social standing or athletic success," it is claimed in this study.

The authors spent five years studying the careers of 18,000 scientists and the educational offerings of 490 colleges and universities. Special case studies were made of twenty-two liberal arts colleges that had a high proportion of graduates engaged in science as a vocation. A section of the

book is devoted to outstanding science teachers. A ten-year period was under study for the findings announced by the authors—1924-34.

"Independent liberal arts colleges produced proportionately 50 per cent more scientists than large universities, while engineering and technological schools were extremely non-productive of scientists," the authors discovered. The Midwest and the Pacific Coast sent far more graduates on into the sciences than did those in the East. The South produced the fewest scientists but was high in the training of mathematicians.

The book is highly thought-provoking. It causes one to ask himself why those endowed with wealth do not distinguish themselves in scientific fields; why the greatest proportion should be from lower-middle class families. It makes one wonder about all the ballyhoo for bigness of colleges and universities; the passing publicity and acclaim of athletic prowess; the prestige of gold-row fraternities and societies; the enormous funds expended on great and elaborate buildings and the almost endless lines of scientific equipment at some schools. Moderately priced colleges, not the most expensive nor the least expensive, were in the lead in producing the scientists. Anyone acquainted with these schools knows that they are limited in plants, equipment and funds. Yet out of these schools a stream of highly productive scien-

tists has been pouring to enrich and strengthen American life.

This book should be brought to the attention of prospective donors for American education. The plight of many independent colleges is one of the crises in American education. Business and industrial concerns which demand personnel of great ability as productive thinkers may well consider many of these schools as objects for benefactions out of pure selfishness. The welfare of their own businesses may depend in large measure on giving financial strength and stability to these hard-pressed institutions.

* * *

The Congressional Record is coming to the *Desk* again after a lapse of several months. Number 1 of Volume 99 contains information about the registered lobbyists operating in Washington. A total of twenty-eight pages, three columns, small type, is required in this issue to list the names of the various persons and concerns engaged in lobbying. We ran an estimate by pages of the numbers but did not make an exact count. Our estimate is that between 600 and 700 persons or groups are engaged in this kind of effort.

The statements of expenses and how they are expended vary from just a few dollars, in some cases, to many thousands. On the first page one reports a total of \$229,406.99 spent in 1952. On page 2 is another which reports a total of \$182,910.78; here is still another

on page 78 which reports a total of \$349,367.09; yet another concern reports receipts for the year of \$352,050.85. A study of the groups involved and the amounts of money reported spent by them reveals the pressures under which legislators often work. This does not mean that lobbying as such is an evil practice. It is frequently necessary as a source of information for proper legislation. It is often similar to the pleadings of lawyers before the courts. Arguments and evidence presented by the prosecution must be balanced by counter arguments and evidence

by the defense. Out of this process the judge and jury may come to better conclusions regarding the case before them.

Educational associations are conspicuous by their absence from the listings. Even if they were registered for purposes of lobbying, it is quite likely that their reported expenditures would be in the lower brackets. Most educational associations take the position that they are professional organizations. What evidence they present on issues affecting education is usually given on request of Congressional committees.

Recent Writings

JUDGING THE NEW BOOKS

EDUCATIONAL POLICIES COMMISSION. *Education for All American Youth — A Further Look*, Revised, 1952. (Washington, D. C.: National Education Association). Pp. xi + 402. \$2.00.

This revised edition of *Education for All American Youth*, first published in 1944, purports to reflect fundamental changes which took place in the United States and the world during the eight-year interval between editions. It proposes a comprehensive educational plan for all of the eleven million youth between the sixteenth and twenty-first birthday. Significantly, the community college has been conceived of as the keystone in the over-all educational plan.

Like the 1944 edition, *A Further Look* has been written from the viewpoint of an observer who reports the conditions which exist in three imaginary, "but representative, secondary-school environments." The portrayal is presented as a synthesis of practices now in effect in part within many good schools throughout the nation. The descriptions symbolize schools "as they *can* be in the third quarter of the twentieth century." But in bold-face type near the beginning and frequently in the pages that follow, the authors warn that "these descriptions are not blueprints; they are samples." They are not intended to be instructions

or models handed down from a central agency, but "are offered, rather, in the hope that they may stimulate and aid the planning and action which are already underway in many states and communities."

Besides this effort to forestall the critics of centralization in educational administration, there is no overt attempt in the new edition to preclude other criticisms that the first edition evoked. For instance, to those critics who would maintain education for the select from among the eleven million youth, the authors evidently expect the volume to speak for itself. Suitable programs would be fashioned for *all* youth according to their "imperative needs."

The volume consisting of ten chapters has an index to selected topics and a general index citing the materials on "Grades XIII and XIV," "Community Colleges," "Junior Colleges," "Advanced Secondary Education," and "College and University."

The first chapter, "The Developing Secondary School," takes the position that education for all American youth is still a young and growing enterprise. Today America stands about midway between the traditional secondary education developed for only a small fraction of youthful society and education for *all* youth.

Chapter Two, "In This Uncer-

tain World," pays attention to some of the responsibilities of the secondary school brought about by national and world conditions. The pre-service orientation program should include special instruction in mathematics and science, mechanics and electronics, communication, skills leading to self-reliance and health in emergencies, ethical and moral conduct under military conditions, and the location, background, and culture of foreign peoples.

This chapter also emphasizes the impact of the uncertain times upon young women. It makes a plea that all youth be given a better comprehension of social, economic, and political problems confronting the nation; of history and world affairs; and of the meaning of freedom and its increase among peoples.

The third chapter, "For All American Youth," outlines eight categories of educationally significant differences of youth, and seven common qualities that are fully as important to education. In a preview of the next six chapters the authors state that they will describe the schools for youth in two selected communities in the mythical state of Columbia—in Farmville, a rural area with a country village as its center, and in American City, a city of 150,000, which is the industrial and commercial center of a larger region.

The fourth, fifth, and sixth chapters treat three different aspects of "Farmville Community School."

Chapter Four, "—District Characteristics and Youth Needs," reveals that 36 per cent of the American people in 1950 lived in Farmvilles. Forty-two per cent of the children and youth under the age of twenty-one were included in this third of the population. Despite the migration from rural areas to urban and defense centers, increased farm production has been made possible by more efficient operation, enlarged use of farm machinery, conservation, and favorable weather conditions. Although farm income increased greatly, farm wages remained considerably below wages in the city. Predictable domestic factors seem now to presage a security and prosperity from which Farmville can plan its future with confidence. As a stability factor, however, it has been estimated that forty-six out of every hundred farm youth and thirty-three out of every hundred youth from villages and rural towns should go to the cities.

In planning the educational program for Farmville, it was decided that the secondary school should include eight grades, from seven through fourteen, and that it should also provide educational services for out-of-school youth and adults.

The educational needs from twelve to fifteen are largely common to all; hence the curriculum is broadly the same for all pupils. Teachers take account of individual differences. From sixteen to about twenty the diverging interests of

individuals are taken care of in emphases on occupations, intellectual pursuits, and recreation. Common needs continue to be emphasized under citizenship, family living, health, and cultural heritage.

Following graduation from high school, those who expect to live in Farmville are encouraged by the school staff to remain in the school, either as full-time students or in part-time and evening classes. In Grades XIII and XIV about half of the program is vocational. The authors state clearly that Farmville's Grades XIII and XIV offer advanced training only in a few of the chief occupations of town, village, and farm. No specialized training in occupations or junior college level courses are authorized in this "advanced secondary school." Special consideration is also given through Grade XII to youth who expect to live and work in cities and to those who plan to attend colleges and professional schools.

The fifth chapter, "—Curriculum Plans and Activities," goes into considerable detail on ways the program was developed, and the sixth chapter, "—Organizational Plans and Purposes," shows the administrative scheme which includes the distribution of work over a seven-hour school day for forty weeks for grades ten through fourteen.

The seventh and eighth chapters, "Schools for Youth in American City," treat two main aspects of

the development of the urban educational program. The seventh chapter, "—The Development of a Program for All Youth," characterizes the needs of society and of youth. Ten recent changes in youth education are outlined. How the changes occurred is also discussed. All three American City high schools were made comprehensive in purposes and programs. A community college was also organized. It was believed that the educational program for the entire period of youth should be planned and operated as a whole. From Grade VII through Grade XIV, the curriculum should have continuity from year to year and significant relationships among its constituent parts within each year. While a 4-4 secondary school system might be better suited to such a program, it was believed that a 3-3-2 system could be adapted to these ends. In contrast to Farmville's curriculum, there was developed an integrated course in "Common Learnings."

The eighth chapter, "—The Program of Learning for Youth Today," details the essence of a program which in Grade X consists of only two periods out of six per day devoted to individual interests and vocational preparation, gradually increasing to four periods in these areas in Grades XIII and XIV. A year of science is required of all in Grade X. Health and physical education is required daily through Grade XIV. In Grades X, XI, and XII, a two period block is sched-

uled for "Common Learnings," whereas this course is reduced to one period in Grades XIII and XIV.

Additional approaches for developing an effective program include: guidance services, individualized programs and records of progress, meeting the problem of money for personal expenses, adapting schedules to individuals, special opportunities for the gifted, special services for the handicapped, and services after youth leave full-time school.

Chapter Nine, "A State System of Youth Education," will likely be of most interest to those concerned with the junior college. Columbia provided for eleven locally controlled community colleges, tributary areas being mapped out for each one.

The community college is one of the two types of "advanced secondary schools," the second being the extended vocational plan of Farm-

ville which apparently is not to be considered of junior college level. Both types come under the state's modern minimum educational program. Vocational fields are allocated among the community colleges. Reorganization of school districts and the system of financing make it possible for high school and junior college youth to attend schools away from home. All community colleges have residence facilities for a limited number of non-commuting students.

The tenth chapter, "Education for All American Youth Moves Forward," provides short accounts of "important developments" in schools during the past five years reported by selected school systems and state departments of education.

This revised edition will undoubtedly draw fire from certain critics. It is filled with thought-provoking ideas for all.

LEON N. HENDERSON

Selected References

MAURICE LITTON

Rathney, W. M. and Mooren, Robert L. "Sampling Problems in Follow-up Research," *Occupations*, 30:573-78, May, 1952.

In any follow-up survey the results are likely to be biased if less than 100 per cent returns are utilized.

Some conclusions that seem to be indicated by a follow-up study of high school graduates in which 100 per cent returns were obtained are:

1. Graduates of high schools in industrial communities tend to respond

faster to follow-up requests for information than graduates of schools located in agricultural areas.

2. Subjects who have received intensive individual attention respond faster than those who have not.

3. Subjects who have been interviewed frequently in a counseling program and those who have sought out further counseling respond more quickly than those who have not.

4. Girls respond faster than boys.

5. Subjects who rank highest in their graduating classes tend to respond faster than the lower ranking subjects.

6. Subjects who score high on intelligence tests respond faster than the lower scoring students.

7. Those subjects who are continuing education beyond high school respond more quickly than those who enter employment.

8. Of employed subjects, those who are in the higher level jobs respond faster than subjects who are unem-

ployed or employed at unskilled jobs.

9. Those subjects who report satisfaction with their post-school activity respond more quickly than those who are dissatisfied.

10. Youth who are uncertain about their vocational choice during the last month of senior high school do not reply as quickly as those who indicated definite plans for post school activity.

All Expense Tours
STEAMER, HOTELS, MEALS INCLUDED
Europe \$485
LONDON—PARIS—SWITZERLAND
Special Tours for Teachers,
Jr. Doctors, Nurses
36 days \$485
LONDON—PARIS—ROME—Naples—
Switzerland—Capri—Sorrento—Riviera
55 days — \$630
For College—High and Public
School Teachers (Sabbatical Leaves)
3 months—\$745 4 months—\$865
Including North Africa—\$945
PARIS—ROME—FLORENCE
FRENCH RIVIERA—CAPRI
The Tours are arranged by a N. Y. State
licensed Travel Agent
WESTROPA CORP., Room 705
507 FIFTH AVE. N. Y. 17, N. Y.
Telephone MU 2-0115

Our well-known extraordinarily low-priced Tours

SPECIAL TOURS for TEACHERS

Students and White-Collar Workers

LONDON-PARIS
Scotland **AIR COACH**
\$635 to EUROPE

SHORTER TOURS
FOR SHORTER BUDGETS

England
Germany • Belgium

MONTERREY TEC

Member Southern Association of Colleges and Secondary Schools, Member Association of Texas Colleges

THE SUMMER SCHOOL OF DISTINCTION

July 11 to August 22, 1953

Intensive Spanish and English History, Literature, Philosophy, Sociology, Government and Law, Geography and Geopolitics, Folklore, Arts and Crafts, Special Workshops.

- INTERESTING EXTRACURRICULAR PROGRAM
- OLYMPIC SWIMMING POOL
- MODERN PLANT IN BEAUTIFUL LOCATION SURROUNDED BY MOUNTAINS

Write for full information:

INSTITUTO TECNOLÓGICO DE MONTERREY

Escuela de Verano, Monterrey, N. L., Mexico.

CAPS, GOWNS and HOODS

Special Low Prices on Group Purchase Orders

For over 45 years colleges throughout the nation have chosen beautiful, authentic Moore Caps, Gowns and Hoods for students and faculty. Write us today for information and low group purchase prices.

E. R. MOORE CO.

932 Dakin St., Chicago 13, Ill.

25-34 Jackson Ave., Long Island City 1, N. Y.

1908 Beverly Blvd., Los Angeles 4, Calif.



In 1918

—Carnegie organizations established TIAA to serve the life insurance and annuity needs of the educational world.

In 1952

—TIAA established the new College Retirement Equities Fund, companion to but distinct from TIAA. This plan permits a portion of annuity premiums to be invested in common stocks and provides a program designed to keep step with economic trends and living costs.

Individuals

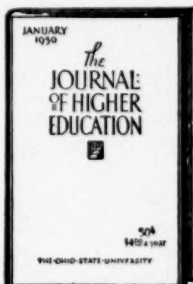
Groups

Write TIAA-CREF today for details on this new approach to retirement income.

TEACHERS INSURANCE AND ANNUITY ASSOCIATION COLLEGE RETIREMENT EQUITIES FUND

522 Fifth Avenue

New York 36



Commendation

by a person of note in
higher education which
merits your attention . .

"THE JOURNAL OF HIGHER EDUCATION is a valuable medium for the presentation of contemporary ideas about college and university education. I have found it very useful."

President Taylor, Sarah Lawrence College

Subscription \$4.00 a Year

OHIO STATE UNIVERSITY • COLUMBUS



Outstanding 1952
American Government Texts

GOVERNMENT BY THE PEOPLE:

The Dynamics of American National Government

by JAMES M. BURNS, *Williams College*, and
JACK W. PELTASON, *University of Illinois*

Here is a scholarly study of American government that stresses *people and dynamic processes*, rather than the minutiae of legal and political machinery. In a lively style, with numerous case studies to dramatize government at work, and a wealth of illustrations, cartoons and charts, the authors examine the major problems of American national, state and local government today.

946 pages • 6"x9" • Published March 1952

125-page State-Local Supplement published September 1952

PROBLEMS IN AMERICAN GOVERNMENT:

An Introduction to Political Analysis

by ROBERT E. LANE, *Yale University*

This new and unique text is a student's workbook of political cases, containing accounts of political events, processes, or decisions, such as the last-minute voting shift in the 1948 elections, the recall of General MacArthur, etc. Thirty-seven problems or cases cover national, state, and local government. Emphasis is on both politics and ideology.

373 pages • 7"x10½" • Published March 1952

For approval copies write



PRENTICE-HALL, INC. 70 FIFTH AVENUE, NEW YORK 11 N.Y.